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OUTLINES OF ECONOMICS

BY

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PREFACE.

WHEN I began the present work I asked the assistance of Mr. H. H. Powers, then of the graduate department of the University of Wisconsin, and now professor-elect of Economics and Sociology in Smith College, Northampton, Mass. I anticipated help which could be passed over with little more than mere mention in the preface, but the aid received is so great that it becomes both my duty and pleasure to make particular acknowledgment of it and to state frankly that this book is a joint product. While I am primarily responsible for the whole, as according to agreement I have freely rejected, qualified, or accepted what has been done by Mr. Powers, it should be known that much credit is due to my fellow-worker for whatever success the book achieves.

Mr. M. B. Hammond has rendered efficient assistance in the collection and critical examination of statistics, and Mr. J. W. Crook has read the proofs of the book and offered useful suggestions from time to time. I am also indebted to Mr. David Kinley for helpful suggestions. All of these gentlemen are connected with the graduate department of Economics in the University of Wisconsin, and I wish to express to them my thanks for their aid. Professors Turner and Haskins, of the same institution, have read the earlier chapters in the book, and I have to thank them for helpful criticism.

The present book was begun as a revision of my *Introduc-*

tion to *Political Economy*, but it has become practically a new book, and the publishers will retain the older work on the market. This newer work is more theoretical, and perhaps naturally follows the earlier one. The *Introduction to Political Economy*, which has been used in many schools and colleges, gives large scope to a teacher to develop his own line of thought, and may still be preferred by some who have become accustomed to it. In any future revision of the two books an effort will be made to develop still further the peculiar characteristics of each; the aim of the *Introduction* being to furnish chiefly historical and descriptive material; the aim of the *Outlines* being to give a systematic sketch of theory.

As this edition is intended primarily for colleges an attempt has been made to include in the Appendix a certain amount of material indispensable for successful college work. The day is past when economics can be considered as the science of a single text-book, and while the careful mastery of a single elementary work consistently representing some system is the best way to lay the foundation for subsequent study, the student should understand from the outset that an extensive acquaintance with the field of economic literature is indispensable to the formation of sound and just opinions. It is with this end in view that so much space and attention has been given to the bibliography and to the subjects for individual study. An extensive use of this part of the book cannot be too strongly recommended.

MADISON, WIS.

RICHARD T. ELY.

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BOOK I.

HISTORICAL INTRODUCTION.

CHAPTER I.

THE ECONOMIC LIFE OF UNCIVILIZED MAN.

WITHOUT troubling ourselves at present about exact definitions, let us notice what kind of history we have before us. The history of literature, the history of government, the history of religion, and many others, all have one thing in common: they are all of them histories of man. They each treat of man, however, in one line of his activities. So with economic history. Its subject is man, but it deals primarily not with his thought or his government or his worship, but with his efforts to get a living. If any one is tempted to think this a narrow subject he should remember that it means more than bread and butter. Literature, science, art, religion, government, all require, not only bread and butter for those employed in them, but books and papers and laboratories and art galleries and churches and court-houses—all of them a part of man's "living." It is plain that every kind of activity depends on material things to some extent. So this subject of ours—man in his effort to acquire and to use material things to satisfy his wants, or, in other words, to get a living—is of interest to everybody and to every kind of human effort.

The various ways of getting things may be roughly reduced to two: one must *find* things, or else one must *make* them. Of course these two ways shade into each other, but they are sufficiently distinct for our purpose. Uncivilized man finds things; civilized man makes things. Indeed, *material civilization consists largely in wanting many things and in learning how to make and to use them.*

The Hunting and Fishing Stage.—The first want is food, and the primitive man, who has not learned to make

or "raise" it, must depend upon what he can find. Wild berries and roots will count for something, but plainly not for much. He must live principally on game and fish. It has been suggested that as man has to fight many animals to keep them from eating him he naturally eats them when he kills them in the fight. This would hardly seem to be a satisfactory account of the origin of the use of animal food, for as a rule the animals dangerous to man are not those he eats, but it is possible that the attacks of wild animals may have helped to accustom man to slaughter animals generally, and this may have rendered it easier to kill even men. Hunting is the first thing in which man learns skill.

Another thing that sometimes arises at this early stage is cannibalism. Cannibals are not simply very wicked men, but men who are very ignorant and very hungry. Inasmuch as they do not know enough to help Mother Nature to raise food she furnishes very little. A tribe of hunting savages is said to require fifty thousand acres per person to live on. Now, as we know, the human race tends to multiply rapidly. Hence they live continually on the verge of starvation. If we remember that even civilized peoples are guilty of occasional cannibalism in times of famine we shall not be surprised that uncivilized man should be guilty of it frequently when he has to choose between that and starvation. The subject of cannibalism is one which does not appear to have been sufficiently investigated, but the practice is often connected with war and religious rites. If begun as a result of hunger it would seem not unnatural that it should be continued for other reasons by an ignorant and degraded tribe.

However, we must not suppose that the lowest savages ever killed and ate one another indiscriminately. No body of men ever existed on the basis of "every man for himself." In the lowest stages men respected family ties, and these in a larger and larger circle, till a tribe was the result. Within the tribe men were brothers who shared what they had with each other. Outsiders were enemies, to be robbed, killed, or eaten as the circumstances might require.

Let us notice very carefully this fact which we find at the very bottom of human life, in the lowest tribes of which we know anything. Man never leaves *all* his fellows to their fate. Even while as yet he is little more than an animal he begins to be a *moral animal*, setting bounds to his own liberty and imposing upon himself certain duties. Of course his morals are crude and his circle of brotherhood narrow, but they are facts. We have said that material civilization consists in wanting many things and in learning how to make and to use them. *Moral civilization consists in perfecting the duties and enlarging the circle of brotherhood.* From the beginning until now man has divided his fellows into those who were to be fed and those who were, figuratively at least, to be eaten, and his progress is measured by the proportion between the two.

What has been said of hunting tribes applies with slight changes to fishing tribes. The difference of occupation is due to location. On the whole, however, fishing requires more skill and more tools than hunting, and so these tribes are as a rule slightly more advanced, and they are more likely to advance to a higher stage in a near future. But primitive fishing, like hunting, is a precarious means of getting a living, and leaves those who follow it in a low social condition. Of course there is little buying and selling under such circumstances.*

So long as man depends for his living upon what Nature furnishes of her own accord population is thin, poverty extreme, starvation frequent, and war and cannibalism a natural outcome between the small and scattered tribes. To be rich, man must learn to want and learn to make; to be strong and safe, he must learn the meaning and extent of brotherhood. We shall see as we go on how impossible it is either to develop or to study these things separately.

* There is said to be little buying and selling to-day among the inhabitants of Iceland, because nearly all produce substantially the same things.

SUMMARY.

1. Economic history is the history of man in his efforts to get a living; that is, to get the things needed in all his activities.
2. He may find things or make them; uncivilized man finds things; civilized man makes them.
3. Material civilization consists in the making and using of things; moral civilization in the development of brotherhood.
4. Uncivilized man fishes and hunts. Scarcity of food makes him a fighter and sometimes a cannibal.
5. Even the savage is a moral animal, and limits his depredations by self-imposed duties.

QUESTIONS.

1. How much is included under the term "living?" What are the economic elements in religious work? in education? in government?
2. What two ways are there of getting things? In which way can man get more?
3. What is civilization? What two kinds and the difference between them? What are the advantages of material civilization?
4. What is the cause of cannibalism? its limits? its cure?
5. Is moral civilization dependent on material civilization? If so, how?

LITERATURE.

English works bearing upon the economic aspect of the developments of civilization are inadequate. The following may be read with profit:

Lubbock, Sir John: *Prehistoric Times*, particularly the last chapter; also, *Origin of Civilization and Primitive Condition of Man*.

Wilson, Dr. Daniel: *Prehistoric Man*, dealing chiefly with natives of America.

Morgan, L. H.: *Ancient Society*.

Tylor, E. B.: *Anthropology*.

Drummond, Henry: *Tropical Africa*, especially chapter iii.

Stanley, Henry M.: *In Darkest Africa*.

Gomme, G. L.: *The Village Community*.

Reports of the Bureau of Ethnology connected with the Smithsonian Institution, Washington.

CHAPTER II.

THE ECONOMIC LIFE OF SEMICIVILIZED MAN.

BETWEEN the uncivilized man, who uses what he can *find*, and the civilized man, who *makes* what he wants, there is a middle ground. The man of this period neither depends on what he finds nor yet makes things to any great extent, but he "raises" his living; in other words, to a limited extent he has learned to give direction to the forces of nature. He has learned to produce, but he lives on "raw materials," not knowing how to work them up. Man very soon makes a few simple tools like bows and arrows and the early stone implements, as knives, hatchets, and arrowheads; but with this exception it is worthy of note that as man begins to subdue nature he begins not with dead nature, but with living nature; he uses not metals, but animals and plants, and learns to increase their amount. Moreover, of these two kinds of living things, he first subdues the higher life, that most like his own, and not until long after learns to control plant life for his uses.

The Pastoral Stage.—Man may have tamed dogs for hunting and sometimes horses while still in the hunting stage, but the pastoral stage begins with an extensive pasturing of animals for food and clothing. Man no longer depends upon hunting; but having learned that if he is to have animals in plenty he must take care of them, not simply kill them, he gains their confidence and now has flocks and herds. Some marked features of the preceding stage still continue. While man now lives upon his flocks the grasses and plants upon which *they* feed are still left to themselves; the flocks still live on what they can *find*. So, while man no longer needs to wander in search of food for himself, he must do so for

his flocks. Cities are, therefore, still impossible. Moreover, while the land will now support many more inhabitants than before, much land is still needed to pasture the flocks, and as the tribes or families roam about at will they frequently come into collision and fight over desirable pastures. Thus war continues, keeping down the population, but with one important change. Cannibalism ceases. For a long time the victims of war continue to be slaughtered, but men with flocks at their disposal do not feed upon human flesh. Doubtless even this is an advance toward brotherhood, for it removes one inducement to war and so paves the way for its final abandonment. Then, too, men very slowly begin to see that war is disastrous, scattering their flocks and destroying their wealth. Thus it is clear that on the whole property tends to make men more humane, although this tendency may be one working within comparatively narrow limits. War becomes somewhat more difficult when men have property to lose, although the pursuit of wealth has itself been the cause of many wars.

The history of Abraham gives us examples of pastoral society and warfare, also of the peaceful settlement of difficulties between Abraham and Lot. Evidently these men are afraid that war will result in their mutual impoverishment. Still it is worthy of note that they were kinsmen, and perhaps would not have made this arrangement but for the feeling, known from the first, that kinsmen must not make war upon each other. War still remains common—due, as we have said, to overcrowding, to the wandering habit of the people, and to human passions of all kinds. It is in this stage that those great migrations occur, so unlike anything we now know, whole tribes leaving their country and seeking a new one, driving out the former inhabitants before them. Many individuals do the same thing to-day; but who ever heard of a whole city, still less a whole country, being abandoned in our day by its inhabitants? That happens only in this early stage, while as yet men are used to a wandering life.

It follows from what we have said that there is very little ownership of land at this time. Tribes as a whole lay claim to certain districts and try to keep other tribes from pasturing on them. But individuals own either no land or very little, and it is doubtful whether even the tribe would claim anything quite like ownership in our sense so long as land is used only for pasturage. The notion of ownership develops as land becomes more useful.

In this stage there are frequently great accumulations of wealth, such as it is. It consists mostly of great flocks, and gold, silver, and precious stones, which early appeal to the barbarian taste for showy ornament. Wealth produces, as everywhere, extremes of condition, the rich and poor being sharply contrasted with each other. But this early wealth does not produce commerce to any considerable extent. The reason is plain. In order to have trade we must not only have wealth, but *diversity* of wealth. There is in general very little reason why men should exchange one ox for another, and as this is about all the primitive "cattle king" can do, trade does not develop. Of course there is some little exchange besides this. The precious metals are obtained in this way by the wealthy, and finely woven fabrics may be procured from a wandering merchant.

The Agricultural Stage.—Man's next accomplishment is of immense importance. He has learned to manage animals to his advantage ; he now learns to manage plants and "raise" them at will. The effect is almost incalculable. The first result is to increase population immensely. The soil which formerly maintained a handful of herdsmen with their scattered sheep now supports a whole community. The second result is even more important. Men cease to roam about and settle in one place. Now, nothing is more necessary for human development than that men should live in definite places and have homes and a country. This results at once in new relations between men, new duties, new arts, and new possibilities. A man never accomplishes much in this or any other age till he settles in a definite territory ;

and in the slow development of the race the taking up of agriculture was a decided advance.*

A third result which came naturally though gradually was the private ownership of land. The cultivation of the soil required a good deal of detailed personal attention, and some sort of a division was necessary in this work. We must not suppose, however, that this first parceling out of the soil resulted immediately in private ownership. The tribe still owned the land, and the division was only a temporary one for purposes of convenience. Strangely enough, the first owners of the soil were in many countries not the cultivators, but the chieftains of the tribes, an ownership which became very important in its later consequences, as we shall see.

But the most important characteristic of this period is slavery. Men now cease to kill their prisoners of war, but make them slaves instead. Slavery begins long before agriculture, but it now attains its full magnitude as an institution. It is hard work to till the soil, and men, especially primitive men, are not fond of hard work. So they save the lives of their prisoners in order themselves to be spared the necessity of work. This is a poor reason for becoming humane, perhaps, but it is well to become humane even for a poor reason. There have been many discussions as to whether slavery is right or wrong. It is both. There is a time in human development when slavery represents a step in human progress, the best and longest that men are able then to take. Such a step is always right. It is wrong when men have learned how to do better. The slavery of the early period we are now considering was not only inevitable, but, inasmuch as slaves, like other property, were seldom bought and sold, it was very mild. The existence of a large slave population, however, which can be kept regularly at work greatly

*The Book of Job gives us a fine picture of an early agricultural stage. The plow was in use, but wealth was estimated in "live stock." His "substance was seven thousand sheep, and three thousand camels, and five hundred yoke of oxen, and five hundred she asses, and a very great household; so that this man was the greatest of all the men of the east."

increases the wealth of society. We now know that free labor is better than slave labor, especially in the later stages of industrial development; but, inasmuch as primitive man is with difficulty induced to work at all, slave labor is a great improvement on free idleness. Of course all that we have said is subject to many exceptions, for as men develop they become more diverse. Among some peoples slavery never became an important institution, while in others it was highly developed, affecting their entire social life.

With every increase of wealth the tendency to trade increases, but as yet the occasion for it is comparatively slight, for men's wants and wealth are still much the same everywhere. Fixed residence develops village communities—not cities; these have a different origin—and these have little to gain by trading with others like themselves. Such trade is usually by barter; that is, goods are exchanged for goods, not for money. Money does not at this time perform important functions in the life of every day.

But we must notice the change or enlargement in men's ideas during this period. This we shall find in their laws and customs; the Mosaic code is our best example, as it was designed to govern a people in the pastoral and agricultural stages. Before this time there were numerous customs regulating life, and there may have been such a thing as even the tyranny of custom, but we are struck with the immense increase of duties and restrictions which are now recognized. With fixed residence has come the State, with its institutions of justice, guidance, and protection, its numerous *thou shalt*s and *thou shalt not*s. At every turn we see that men may not do as they please, but that they are restricted, or perhaps, rather, have restricted themselves for their own good. Why all this, when we saw comparatively little of it before? Simply because men are now become permanent neighbors, and they have need of an understanding on many points to keep from trespassing on each other's liberty. If men are to live close together and accumulate property and enjoy it in peace there must be general agreement among the many and vig-

orous compulsion for the few on many points. And so again interests of property and person lead men to recognize duties and establish laws which they learn to obey later as a matter of sacred honor, even though it cost them life and property to do so. It is noteworthy, however, that these duties and laws are chiefly recognized at home. Beyond the boundaries of the tribe or nation these duties are scarcely held to be binding at all. In the early German communities, when the scattered tribes were still small and separated by unoccupied land, each tribe lived in relations of brotherhood within itself, property being common and mutual rights closely guarded. But between different tribes no rules held. When they met on the neutral ground or *Mark*, as it was called, to trade, all kinds of sharp practice were deemed admissible. Things not to be thought of at home were here unquestioned. This *Mark* and the trading that took place in it suggest our modern *market*, and even if the word market is not derived from the word *Mark*, as their similarity would indicate, it probably gets some of its practices from the trading in this neutral ground. Thus we still see the division with which we are already familiar into those who are protected from man's rapacity by moral restrictions and those who are not.

SUMMARY.

1. Between the finding of things, which is savagery, and the making of things, which is civilization, comes a period of "raising" things, or semi-civilization.

2. The domestication of animals assures subsistence, helps to stop cannibalism, introduces slavery, checks war, and creates wealth.

3. The cultivation of the soil fixes residence, extends law and custom, and develops tribal ownership of land.

4. Barter trade begins with a different code of law, and honor for neighbors and strangers, much to the disadvantage of the latter.

QUESTIONS.

1. What part of nature does man subdue first? Why?

2. Why does the hunter not accumulate wealth? Why does he not own land? Why does the shepherd not own land? What advantage has the shepherd over the hunter?

3. What influence has agriculture on wealth, and why? on slavery? on law? on moral civilization?

4. What was the *Mark*? its code of honor? How much does this code correspond with our present market code?

LITERATURE.

Maine, Sir Henry: *Ancient Law; Village Communities in the East and West; Early History of Institutions; Early Law and Custom*; especially chapter viii in the last work. These four works are standard.

Seeböhm, F.: *The English Village Community*.

Allen, W. F.: *Monographs and Essays*.

Wallace, Mackenzie: *Russia*, contains a popular account of Russian communities.

Stepniak: *Russia Under the Tsars*, contains a clear account of the Russian village community, the Mir. A cheap edition is published in Harper's Franklin Square Library,

NOTE.—The works enumerated at the end of these chapters often bear upon the subjects of other chapters as well, but to save space we shall mention works but once, except in cases of special importance. No attempt is made to make the enumeration a complete bibliography.

CHAPTER III.

THE ECONOMIC LIFE OF CIVILIZED MAN—FIRST STAGE.

It must not be supposed that these periods are sharply defined in date or character. They shade into one another gradually, and come at very different times for different peoples. But, nevertheless, most peoples pass through these stages, and at any particular time a given kind of economic life will be found to be dominant among a given people.

We have said that civilization begins with *making* things, or, if we prefer a longer word, manufacture. This is of two kinds, *hand* manufacture and *power* manufacture. It is with hand manufacture that we now have to deal.

The Trades and Commerce Stage.—Though this stage is characterized by the development of *trades* and *commerce*, as the name implies, the real cause of this is manufacture. Men learn to weave fabrics and fashion things in wood, metal, etc., and use dead as well as living nature. The results of this are:

1. *Trades.* To make anything well requires so much skill that a man needs all his time at it. The man who makes only one thing makes it better than he who makes many things. So labor learns to specialize, as we say, and we have division of labor or trades, such as blacksmiths, shoemakers, weavers, dyers, etc.

2. *Commerce.* We have seen that there was little commerce so long as everybody was engaged in one business—the raising of animals and grain—because each had nearly all the kinds of wealth which any one else had to sell him. But, plainly, when men learn trades and each makes only one kind of an article, he will neither want all the things he makes nor make all the things he wants. He must *trade*.

And so wherever manufacture develops we find trade growing up as a necessity. For convenience' sake some men spend all their time in exchanging goods which other men make, and so save them time and trouble. Different countries have different trades, and merchants find it convenient to make exchanges between them.

3. *Money.* Plainly, such a general system of exchange cannot be carried on by barter. The shoemaker who needs bread cannot wait till he finds a baker who needs shoes and make a trade with him. Under such a system everybody would be poor for the lack of the things that everybody else was anxious to furnish. They would simply fail to make necessary exchanges. In order to effect exchanges easily we must have some common article for which we can exchange everything. This was early felt, and yet it has proved one of the most difficult of all problems to find precisely the right thing and just enough of it. Many things have been tried: near the times of barter, skins, shells, cattle, etc.; then iron, copper, bronze, silver, and gold. Silver and gold, which still constitute the world's universal money, came fully into use during this period, and money becomes increasingly important.

4. *Cities.* We have seen the tendency of those employed in agriculture to form small village communities. These existed in early times for reasons of protection, coöperation, and sociability, but they could not become large because agriculture required the population to be scattered. Manufacture requires precisely the opposite. If people are to live by trades and exchanging each other's goods they must be near together for convenience' sake. So cities situated according to the convenience of commerce develop wherever men learn to manufacture. Except in case of rare combinations of political forces, cities not only do not, but they cannot, grow up until men learn to manufacture; for if they only knew herding and agriculture the inhabitants would perish for lack of employment where there was no land for cultivation or pasture. So, wherever we

find the remains of a city, we may conclude that the people had learned manufacture and commerce and passed into the stage of economic civilization.

5. *The Guild System.* New forces introduced into society do not take care of themselves. So the trades had to organize in order to reduce their business to some kind of order. Each trade had its guild, which specified in detail how the business should be carried on, how many should be admitted to it, and how the trade should be learned. Where, as was usual, the guilds controlled the cities their rules were early sanctioned by law.

6. *Political Freedom.* The agricultural stage had in the greater part of Europe culminated in the feudal system. The feudal lord occupied a commanding position, like that held by the patriarch in an earlier state, and he owned the land occupied by the tribe, and the tillers of the soil had become serfs; that is, while they could not be sold they were obliged to stay on their lord's domains and work for him for such pay as he chose to give them or such remuneration as might be established by custom and public opinion, especially as manifested through the Church. The manufacturing cities were the natural rivals of these great feudal estates. The lords felt their power threatened and bitterly opposed the cities. And so there were wars and alliances and treaties until finally the cities conquered, as they were bound to do in the end. These cities were free, and serfs who fled to them were accepted and made freemen. Thus feudalism began to perish, and, slavery and serfdom gradually disappearing, another step was taken toward liberty and humanity by man's progress in learning to get his living.

SUMMARY.

1. Economic civilization begins with manufacture, at first by hand.
2. The result is the learning of trades and the development of exchange and commerce.
3. Money is devised to facilitate exchange.
4. Trades organize into guilds, and commerce develops cities which become free and destroy the feudal system after bitter opposition.

QUESTIONS.

1. Why does manufacture necessarily lead to commerce?
2. What is the difference between barter and money exchange? What things have been used as money? Why did people choose such things?
3. Why could not agriculture alone develop cities? Why do they develop under manufacture?
4. What was a guild? What were its purposes?
5. What produced the feudal system? Why? What were its advantages? Its weakness? What caused its downfall? Why?
6. What was the effect of manufacture and commerce on slavery and serfdom? Why?
7. Does liberty depend on the absence of restraint? Why?

LITERATURE.

Rogers, Thorold: *Work and Wages.*

Ashley, W. J.: *Introduction to English Economic History and Theory.*

Cunningham, W.: *The Growth of English Industry and Commerce.*

CHAPTER IV.

THE ECONOMIC LIFE OF CIVILIZED MAN—SECOND STAGE.

WE have seen in the preceding stage an immense development of wealth and of those social institutions upon which the welfare of men depends. This all results from man's learning to make things by distribution of occupations or division of labor. But there was one great limitation to this progress. Things were still made and moved for the most part by mere muscle. Machines were used to some extent, but they were almost altogether such as could be run by the power of man or some lower animal, as the ox or the horse; for with the exception of sailing vessels, windmills, and water wheels men knew no other. Invention progressed slowly under such circumstances; but the tools and implements already in use were improved, their number gradually increased, and wind and water were utilized as forces to a greater extent as time went on. When things were made they were hauled and transported by horses and mules or boats and vessels to their destination. Now, mere muscle is an insignificant thing compared with the powers of the universe, and man accomplishes relatively little so long as he depends upon it. But man has more brains than any other creature, and progresses by their use. The next step in progress is easy to anticipate.

The Industrial Stage.—The characteristic of this stage, as we have said, is *power manufacture*. It is hardly necessary to say that this dates from the invention of the steam engine in 1769. Though little used at first, it was destined soon to accomplish changes such as men still hardly understand. Up to this stage men had practically what their own muscle could produce. Now it is estimated that the power

employed in manufactures produces twelve times as much as all human labor could produce unaided.* In some manufactures, as in making steel rails and sawing lumber, the power employed is many hundred or even thousand times that of the workmen's muscle. This is plainly an advantage. The great number of things which we now enjoy must be a matter of satisfaction to all who believe in human comfort. Yet there appear to have been few periods in human history when so many have been dissatisfied. What is the reason of all this? Simply that the change from the old to the new way of manufacture has been violent and rapid, and has required a reconstruction of the old social order. The old system of rights and duties and laws would not apply to the new conditions, which soon broke them down and left society in a disorder from which we have plainly not yet recovered. Men learned with astonishing rapidity how to make new things, but they were slower in learning how to use them wisely, much slower still in learning how to distribute them justly. So manufacturers made more than they could sell, and had to stop, throwing workmen out of employment until factories started up with another spurt, only to stop again with returning "hard times." The multitude of hand manufacturers found their business ruined and suffered abject misery before they understood the situation and moved to the great cities to become workmen in the factories. The process moved on slowly, and one trade after another had the same fate. Some are in the process to-day. There is always the same reluctance to give up the old business, the same poverty and hardship compelling men to do so, and the same feeling of wrong and injustice at the dire

*Mr. Garnier, in Lalor's *Cyclopedia*, estimates that in the production of flour the labor of one person is equal to that of one hundred and forty-four persons in the time of Ulysses. In the iron industry twenty-five times as much is now produced with the best inventions as in the Pyrenees with the old methods. In the cotton industry three hundred and twenty times as much is produced now per person employed as in 1769. Transportation by railway is ten times easier than on ordinary roads.

compulsion. Let us notice some of the contrasts between this and the former stage.

1. *Relation Between Classes.* Under the system of hand manufacture each master in the trade worked by himself or with a few others. He employed one or more journeymen and apprentices, but as these were simply learners, who in time became masters themselves, we may say that men in full possession of their trade worked on their own account and *owned what they made*. If prices rose they received the benefit of the higher prices; but this was seldom the case, for the guilds regulated the number of masters, the number of apprentices, and the mode of manufacture. Thus all went on evenly, employment was relatively constant, and there was in the first part of this period general satisfaction with the existing order, although, of course, there were then, as there always have been, individual grievances. Strictly speaking, there were no class divisions in manufactures, apprentices and journeymen being simply masters not grown up, and living on friendly terms in the master's family as his industrial children. This system was not specially favorable to progress, but it was good for social order, which is the next best thing.

But each workman cannot have an engine and machinery. They cost more than he can pay, and furnish more power than he can use. If the masters had known enough, they would, perhaps, have combined, bought machinery, and changed their methods; the local guild would have become a coöperative factory, and all would have gone well. But they did not know enough. Men are generally opposed to change and "new-fangled notions." So a few, more enterprising and wealthy than the rest, made the experiment to the certain loss of the rest. We can hardly expect them to enjoy the process or be patient under its operation. They appealed to the guild laws, but these were not equal to the emergency. They turned mob and broke machines, but the result was only delayed a little. With their fortunes wasted and their business ruined, they had nothing else to do than to yield and sullenly

seek places as workmen in the new factory. Before, they had all been "masters;" now they have a master in a sense unknown before. Before, any man with health and sense could become a master, and permanent class distinctions did not exist among them. Now, in some industries, not one in a hundred can by exceptional ability become an independent employer, and the workman knows that he is a workman for life. So we have now two industrial classes, with a great gulf between them which comparatively few men can cross, and with interests which seem irreconcilable. It is not too much to say that the relation between employer and employee has tended to become strained and unfriendly ever since it existed on a large scale—that is, for the last hundred years.

2. *The Wages System.* Formerly the workman had what he made and sold it for what he could get. This was natural under the division of labor, where each man made one article and a whole article. But now we have a much greater division of labor, or rather a combination of labor; for it takes a whole gang of workmen to make a single article. When a set of men have finished a case of shoes, and one has cut out the soles and another made the heels, etc., how many shoes has each man made? Then, too, the employer has furnished the stock and tools, and must be paid. How many shoes shall he have? Some way out of the trouble has to be found. The way adopted was the simplest and perhaps the best. The employer takes all the shoes and pays the workmen stipulated wages. This system, which, though very old, has only recently become general, seems natural and right to us who know no other, but it must be confessed that it has not been entirely satisfactory. One reason is that we have discovered no very good way of telling just how much wages to pay. Once it was thought that competition would settle it, and it is true that employers cannot by any means do just as they please; but, after a century's experience, there is a widespread feeling that in all these bargains about wages the workman is at a disadvantage, and does not get

the share which it would be well for him to have. Thus the wages system is a source of difficulty.

3. *Competition.* Under the guild system prices were regulated by custom or law. The man who tried to undersell his neighbor would have been considered a mean man and been boycotted, or treated even worse. He could compete with his neighbor by making better goods, but not much was done in this line, quality, like prices, being generally fixed by custom or law. But when the factory came it *had* to undersell. Only so could it sell its large output. When the competition was once started there was no stopping it. Factories competed with each other, and, as one after another became hard pressed, a new machine was invented or a new process discovered, and progress was continual. It was what men needed to develop their enterprise. Machine followed machine, cost was lowered, and year after year the buyer rejoiced in lower prices. Thinkers of this time were profoundly impressed by the increase of wealth due to competition as well as by the irksomeness of the old guild restrictions, which still made awkward and futile efforts to control the new movement. And so they concluded that the State should not try to guide industry, as it had so long been doing, but that all that industry needed was to be let alone. We shall note later some of the results of the attempt to follow this principle.

4. *Banking and Credit.* The preceding age developed money; this age developed credit. Money is used now chiefly in retail trade, and in large transactions has been almost displaced by credit and the instruments of credit, as checks, drafts, and bills of exchange. A debtor pays his creditor by a check on his bank account. The creditor hands the check into the bank, and the amount is charged to the debtor and credited to the creditor. If the two men have accounts in different banks the banks exchange checks and pay the difference. In the New York Clearing House, where all the New York banks exchange checks and balance accounts, the whole amount of payments averaged

\$113,019,011.01 per day, not long ago; but the checks so nearly offset each other that only \$5,403,941.40 remained to be paid between the parties, and almost all of this was paid in another form of credits, clearing house certificates, and almost none in money. That is, of every \$100 paid, all but \$4.78 was paid in checks and only a few cents in money. To manage this great business of credit, banks, as we now know them, have been created. In 1782 there was but one bank in America, now we have 9,367.*

5. *Transportation.* The moving of things was far less important before this period. Not much could be moved long distances on land while only pack horses and wagons were known. Sailing vessels, although slow, could transport even commodities of large bulk between places connected by water, and cities were then ports. The invention of the locomotive and steamboat has been hardly less important than that of the engine itself. We need not dwell on this point. Any man who has taken wheat to market in a farm wagon over a muddy road, and has seen a railway train dash past him on its steel track, has had a glimpse of the progress we have made in a hundred years. This illustration, however, calls to mind only one aspect of this progress. Another is suggested by the statement that we have become relatively, though not wholly, independent of waterways furnished by nature or by art. Cities can now be located elsewhere than on the seacoast or navigable rivers. The power of man over nature has increased. The perception of this fact led to an excessive reaction, and recently, in the United States, at least, the importance of waterways has been underestimated, to our disadvantage.

6. *Moral and Legal Restraints.* We have seen hitherto a sharp distinction made between neighbors and strangers. The former, in large or small circle, were protected by detailed

* There were in the United States, October 31, 1892, 3,788 national banks, 3,191 State banks, 1,161 private banks, 1,059 savings banks, and 168 loan and trust companies. The latter, though not performing all the functions of banks, may properly be included in our aggregate.

laws and customs from the overreaching of one another, and of strangers; the latter were exposed to whatever treatment might be considered advantageous. A characteristic of the industrial stage is that there is no longer any such clearly defined distinction. We naturally ask, Have all men become brothers, or are they all enemies? Opinions will differ, but few will claim that men in their business dealings are very brotherly. Nor did men make any pretense of establishing universal brotherhood when the old protective customs and laws were repealed. They thought every man could take care of himself if he were let alone. The old customs and laws were so outgrown, so selfish in their later form, and, above all, so utterly inadequate to the new industry that was growing up, that all activity of the State was distrusted. Then, too, the change has been going on so rapidly and constantly that it seemed impossible to devise laws for the new society. The result is that this stage has been characterized, especially at first, by a minimum of law and moral sense in economic life. It would be a mistake to suppose that men were less moral than formerly, but circumstances have turned moral effort into other channels and left the economic life relatively *non-ethical*.

Our history, so far, has been put wholly in general terms for convenience' sake, but the industrial stage, being the one in which we live and whose problems we have to settle, must now be studied more in detail.

SUMMARY.

1. The invention of the steam engine multiplies human power; revolutionary changes and disorder appear in industrial society.
2. The reorganization of industry produces widely separated classes before unknown, resulting in hostility and resistance to the new order, especially to machinery.
3. The subdivision and dependence of labor develops the wages system.
4. Custom gives place to competition in the government of prices, and a great fall is the result. As a result, competition is urged by many as a sufficient regulator of economic relations.
5. Credit now develops, limiting greatly the use of money. Banks are organized.
6. Canals, railways, and steamboats revolutionize transportation.
7. There is a great diminution of moral and legal restraints in business. The economic life of the period, owing to distrust of State interference and confidence in competition, is non-ethical.

QUESTIONS.

1. Why has machinery made relations between employers and men unfriendly? Why were they not unfriendly before?
2. Why do men dislike machinery? Is their dislike justified? Why?
3. What is the objection to the wages system? Why was it not adopted sooner? What system went before it?
4. Were the former objections to competition reasonable? Why? What are its advantages? Its disadvantages? How did machinery introduce it?
5. What is a bank? What good does it do? What is the advantage of checks and drafts?
6. How does transportation affect manufacture?
7. What change of feeling did men experience at this time regarding law and custom? Why? Was it for the better? Why?

LITERATURE.

Toynbee, Arnold: *The Industrial Revolution in England*. An admirable work of which free use has been made in the preparation of this and the following chapters.

Rand, Benjamin: *Selections Illustrating Economic History Since the Seven Years' War*.

CHAPTER V.

THE INDUSTRIAL REVOLUTION IN ENGLAND*—PART I.

THE passage from the trades and commerce stage to the industrial stage is generally known in England as the Industrial Revolution. The name is appropriate. A change that takes place gradually, so that life adjusts itself to the new conditions easily and no great loss or suffering results, a change like that which takes place in the plant which is always growing while it seems to be at a standstill—such a change we call a development or *evolution*. But a change that comes so fast that life cannot adjust itself to the new conditions, a change which breaks down the old order with much confusion and suffering—this we call a *revolution*. In England particularly the adoption of the industrial system was one of these violent changes last described. To understand it we must first notice the condition of things just before it began.

The Economic Condition of England in 1760.—

1. *Agriculture.* We have seen that the cultivation of the soil develops the idea of ownership, first by the tribe and later by the individual. But the slowness of this process may be understood from the fact that in 1760 immense tracts of land were still held as “common” or “waste” land. Seven million acres of such land were made private property between 1760 and 1833. Upon this common land the laborers built their cottages, cultivating little patches of it for themselves, and pasturing upon the rest the few geese or sheep which they were able to keep. The advantage was that the laborers

* In the preparation of the following chapters large use has been made of Toynbee's *Industrial Revolution*, but in accordance with a principle adopted throughout this book detailed references have not been introduced into the text.

were somewhat independent, paid no rent, and had a little means of support besides their wages. The disadvantage was that the land was mostly "waste" in fact, the marshes undrained and the partial cultivation very primitive and poor. A traveler at this time describes it as "beneath contempt." Even the private lands were ill cultivated. It is not strange that Great Britain, raising all her own food as yet, should have had in 1760 little more than one fifth her present population.

2. *Manufactures.* Here we are especially interested, as it was in this department that the great change was to take place. The system of hand manufacture was still in general operation.* The principal manufacture was woolen goods, of which England exported in 1770 about £4,000,000 worth, or nearly a third of her entire export trade. The manufacture was, however, primitive. A writer somewhat before this time thus describes it: The land "was divided into small inclosures from two acres to six or seven each, seldom more; every three or four pieces of land had an house belonging to them, . . . hardly an house standing out of a speaking distance from another. . . . We could see at every house a tenter, and on almost every tenter a piece of cloth or kersie or shaloon. . . . At every considerable house was a manufactory. . . . Every clothier keeps one horse, at least, to carry his manufactures to the market; and everyone generally keeps a cow or two or more for his family. By this means the small pieces of inclosed land about each house are occupied, for they scarce sow corn enough to feed their poultry. . . . The houses are full of lusty fellows, some at the dye-vat, some at the looms, others dressing the cloths; the women and children carding or spinning, being all employed, from the youngest to the oldest. . . . Not a beggar to be seen nor an idle person." This seems a most wretched way to make cloth,

* The word manufacturer at this time signified a person working with his own hands. In 1776, in his *Wealth of Nations*, Adam Smith said, "A man grows rich by employing a multitude of manufacturers." The use of the word as a large employer is of later origin.

but we must not forget that the picture has some attractive features. The "manufacturer," as the *hand worker* was then properly called, had his home, his cows, and his poultry; he bought his own wool, his wife spun it into yarn, and together they wove it and sold it at the "fair," enjoying all the proceeds. These proceeds were not, could not be, very great, and he never became rich, but he enjoyed independence and rude comfort. It is much to say in favor of any system that it produces general independence and comfort, but "not a beggar or idle person." Before the age of which we write, however, this had somewhat changed. Cities began to attract "manufacturers" according to the inevitable law we have mentioned. The inevitable tendency to divide the process appeared; manufacturers found it difficult to buy wool and spin it along with the weaving process. So the processes were divided and a middleman appeared who bought yarn from the spinners and sold it to the weavers. Then he ceased to sell the yarn, but advanced it, keeping a claim on the cloth and paying a certain sum for the weaving. Thus the "manufacturer" became a *workman*, a wage-earner, and a dependent upon the capitalist who furnished the stock. The germs of the factory system thus existed in 1760, though as yet the work was generally done by hand.

The iron industry was next in importance, but England in 1737 imported perhaps 20,000 tons of iron, or more than she produced, while in 1881 she *exported* 3,820,315 tons. The iron manufacture was evidently waiting for the power blast furnace. The cotton manufacture, destined later to eclipse almost all others, was scarcely begun.

3. *Transportation*. This was exceedingly backward. The roads are described by a traveler as "most execrably vile," which would seem a reasonable epithet when he tells us that he found ruts four feet deep and "saw three carts break down in a mile of road." Such was their condition that pack horses were still the common means of transporting goods to and from market. Nothing so greatly impeded the development of manufactures as the difficulty of moving

about and taking wares to any but neighboring markets. The only improvement in this line up to 1760 was the building of a few canals, which were a great help as far as they went; but this was not very far.

4. *Economic Legislation.* This to us will seem strangest of all. The mediæval notion of government was still nominally in force. This notion was in general that detailed and special legislation was required in many places where we now consider general laws preferable. So the State passed many laws to regulate religion, agriculture, manufactures, and commerce. Some of these laws we must notice. We have seen that men did not believe in competition. They dreaded the mischief which a stranger might work, coming into a town and carrying on a trade in an irregular fashion. So, by the law of settlement no man could carry on a trade in a city unless he was a citizen of that city and a member of the trade guild in that place.* By another law he could not get this right unless he served seven years as an apprentice at the trade, and in a manner prescribed in much detail. Further still, there were regulations as to the number of apprentices, so that in any case he might be refused. The purpose of such regulations was to protect the trade from overcrowding and irregular methods, and from the resulting disorder and confusion. Another law required inspection by government officials, because it was thought that society must be protected from adulteration and all kinds of cheating by dishonest manufacturers and dealers, it being taken for granted that buyers did not know enough to tell honest goods from shams. Of course this was so. Even

* The law of settlements aimed also to make each parish support its own poor, and a workman coming into a new town had to give evidence or surety that he would not become dependent on the poor rates. As few could furnish adequate guarantees, this was so serious an obstacle to freedom of movement that Adam Smith said there was in his day scarcely a "poor man in England of forty-seven years of age, . . . who had not in some part of his life felt himself most cruelly oppressed by this ill-conceived law of settlements."

to-day how many can tell pure baking powder, or all-wool goods, from those that are not?

But perhaps the most striking of all was the law which left it to justices of the peace to fix the wages of workmen. It was often held that workmen would be oppressed if left to the mercy of employers; but the real purpose of the law seems to have been the protection of the employer against high wages, and the spirit of the administration of the law appears to have conformed to this purpose. Laws regulating wages were passed after the plague, or "Black Death," had in the fourteenth century carried off a large part of the working population of England; and the avowed aim of this legislation was then to prevent the wage-earner from taking full advantage of the scarcity of labor. Inasmuch as they were held to be thus protected by law in their wages, combinations among workmen were considered unnecessary and dangerous and were strictly forbidden.

We cannot mention the many other laws governing foreign commerce and other lines of business, still less those that governed religion, politics, and other departments of life. What the experience of the eighteenth century proved in England was not that the State should not regulate the economic life of its citizens, but that it was then regulating it in an antiquated and injurious way.

The careful observer will notice that—in spite of laws which, when enumerated, seem to cover all the affairs of life—many subjects of legislation, now regarded as of prime importance, were then neglected. Police protection was inadequate, the fire department, as we know it, was not organized, education was not fostered, and sanitary laws were few in number, and there was then no great branch of the public service engaged in the administration of such laws. This brings us to the last point of this chapter.

5. *The Condition of Thought in 1760.* Here, especially, we shall fail to understand the industrial revolution if we look only at the economic life. A tremendous revolt had begun against the whole system of government we have

described and in favor of liberty. But it would be a great mistake to suppose that this revolt, which carried, eventually, everything before it, showed itself only in the field of industry. The restrictions which were most objected to were those upon conscience and religion. This was the real animus of the revolution under Cromwell a century before; but it must not be supposed that the most of the Puritans desired this liberty for others as well as for themselves. Next to religious liberty political liberty was the desire of Englishmen, and this had been a prominent issue in the revolution under Cromwell. While restrictions upon trade were contentedly accepted the passion for personal liberty worked itself up to a fanaticism. Rousseau stormed against the artificiality of society and summoned men to free themselves from its restraints and return to nature, winning the sympathy of Thomas Jefferson, who was profoundly influenced by French thought. In a universal struggle for freedom economic life could not be left out. The same year that Thomas Jefferson wrote the Declaration of Independence, asserting that all men are by nature free and equal, Adam Smith, formerly a professor in Glasgow University, published *The Wealth of Nations*, the most influential book ever written on economics. We can notice here only the central idea of his remarkable book. It is the same as that of Jefferson, only applied to economic rather than to political life. Men are by nature free and equal; the law should not establish artificial inequalities among them. What men need in business is not protection but liberty. Under free competition each man seeks his own interest, and in seeking his own interest promotes, as a rule, the best interests of society.*

Such was the temper of the time, so universal the impatience with restraint, even the most wholesome, and so mischievous much of the existing economic legislation, that the

* The exceptions to the rule, which the careful reader of Adam Smith discovers, are more important than generally supposed; yet the chief emphasis was laid on the rule and not the exceptions, and the impression which the book produced was in favor of the abolition of legal restrictions.

book was soon elevated to the rank of a gospel of economics, and, followed by works equally great, it inspired the economic policy of the next century. We shall see the results of this policy in the next chapter. It is sufficient now to say a word about its central principle. If we consider this as an expression of the passionate yearning of an age, namely, that all men *should be* free and equal, it is worthy of our highest honor. But if we consider it as a sober judgment it is open to an objection which to-day a schoolboy can see ; men may be made free and equal before the law, but *by nature* all men are *not* free and equal.

SUMMARY.

1. The passage to the industrial stage was sufficiently violent in England to be called a revolution.
2. England in 1760 had a poor agriculture, with much land held in common.
3. Manufactures were divided, largely rural and inefficient, but steady and prosperous in their way.
4. Transportation was backward, roads being exceedingly bad.
5. Economic legislation was detailed and special, adapted to former conditions, but hindering industrial progress.
6. The public mind was in strong revolt against former restrictions, religious, political; and economic.
7. Adam Smith's *Wealth of Nations* asserts the doctrine of economic liberty. The motto of the age is, "All men are by nature free and equal."

QUESTIONS.

1. What is the difference between an evolution and a revolution? Which is best? Why?
2. What were the advantages of waste or common lands? The disadvantages? Who gained most by change to private ownership?
3. Why was the old manufacture of cloth inefficient? Why were manufacturers prosperous? Who suffered most by the old system?
4. What was the general character of legislation in this period? How different from that of our day? What old laws have we abandoned? What new ones have we added? Why?
5. What was the trend of thought at that time? Where did it first appear? What countries did it affect? Who applied it to economics? Why did he oppose labor legislation?
6. Are men free and equal in any sense? In what sense free and equal? In what sense not? What are the inequalities which exist among men? To what are they due?

LITERATURE.

- Taylor, E. W. C.: *Introduction to a History of the Factory System*.
- Wright, Carroll D.: *The Factory System in the United States*. Vol. II, Tenth Census Reports. Reviews English and Continental experience as well as that of America.
- Ashley, W. J.: *Early History of the English Woollen Industry*. American Economic Association Publications. Vol. II, No. 4.

CHAPTER VI.

THE INDUSTRIAL REVOLUTION IN ENGLAND—PART II.

Half a Century of a Passive Policy of Government in England.—It is hard to be fair in drawing conclusions from history. The things that happen are due to so many causes that it is difficult to tell how much any one cause has to do with them. This is especially true of the period of English history with which we now have to do. In addition to the new methods in manufacture there were wars, peculiar facts about land-ownership, duties and taxes, and other things of great influence on the economic life of the period. It is hard to tell, therefore, how much machinery and the new economic policy had to do with it. But that they had much to do with it everybody admits. We must get as clear an idea as we can of what this influence was.

1. *Changes in Legislation.* We have seen that Adam Smith argued for liberty. He asserted that every man, if allowed to do as he pleased, would sooner or later do that for which he was best fitted, and would consequently work where he could get the most wages. Every man would buy what suited him best, and, after some experiment, manufacturers would make what was called for. If one business was making more money than the rest more men would go into it, and by their competition would bring prices down. If men cheated their customers, the customers would go somewhere else, and cheating would not pay. And so on indefinitely. Everywhere men would look out for their own interests, would make the bargain that was most advantageous to themselves. This system of balanced self-interest resulting from competition was the best regulator possible, infinitely better, he claimed, than the old-time laws, which only encumbered the devel-

opment of industry. If the policy of industrial freedom were adopted, he prophesied a great increase in the national production of wealth.

This system was adopted. Not that a wholesale repeal of the old laws occurred—such things never happen in England and are difficult anywhere—but there is a quiet and effective way of changing laws by simply changing men's ideas regarding them and leaving them unenforced. A law that has been long observed has often to be long dead before people gain the courage to repeal it. So the law requiring seven years' apprenticeship before one could enter certain trades quietly died during the eighteenth century, and when, finally, in the labor troubles early in this century, some workmen in desperation discovered the old law and prosecuted employers for violating it the law was first suspended and then repealed, as being plainly ill adapted to the new condition of industry. So, little by little, the old laws were repealed or forgotten, and men were left free to bargain and manufacture as they pleased.

One reason that these laws were the more easily set aside was that they never had been really intended to protect trade *in general* and secure the economic welfare of *all*. In the legislation of the Middle Ages social and political considerations were always mingled with economic questions. The restrictions placed upon trade were not in the interest of trade, but in the interest of a few people engaged in that particular trade. Thus the very influential dealers in woolen goods, alarmed at the introduction of cotton, had secured a law placing a heavy tax on cotton goods, lest these, by their cheapness, should injure the woolen trade. Other trades did the same, till finally there was a network of burdensome restrictions under which all suffered. Laws regulating labor at that time were not so much to help workmen as to check their growing power and aspirations.*

* Adam Smith, in declaiming against laws regulating labor, had in mind laws aimed against labor, and not laws like those of modern times designed to benefit labor. He said in one place in his *Wealth of Nations* that if any law

A striking instance of the unfairness of the old laws is seen in the law against labor combinations. Although capitalists had been allowed to combine from the first, workmen were forbidden to do so under severe penalty. Even after the laws of apprenticeship, regulation of wages, inspection of goods, and many others had been repealed this law was retained, and men who attempted to form unions were severely punished. This was due to the slow recognition of the workman's rights, and also to the curious fact that even the believers in the new gospel were opposed to labor unions, believing that competition among workmen would secure their proper wages and their best rights. Eventually this law also was repealed.

2. *Changes in Manufacture.* In 1769, the year that Napoleon and Wellington were born, James Watt invented the steam engine. It is an interesting fact that Watt was a friend of Adam Smith; and when the city of Glasgow refused to let him work at his trade because he was not a member of the guild at that place, Adam Smith allowed him to set up a shop on the university grounds outside the city's jurisdiction, and thus the two great forces that created the revolution were born close together. The same year that the steam engine was invented began a series of inventions which, during the next fifty years, completely revolutionized the manufacture of cotton. The earlier of these inventions affected only the spinning of cotton, and, while hand spinning immediately ceased, hand weavers were kept busier than ever. The improvement in goods and lower prices immensely increased the demand, while weavers were paid not less, but rather more, than before. Finally, however, the power loom was introduced, and then there was a change. The immense number of hand weavers thrown out of work could not find employment in tending the new looms, nor could they immediately secure another occupation. The

chanced to be beneficial to labor it was sure to be a just law. Writers of our day who protest against labor legislation are opposing laws of a different kind from those which aroused the ire of Adam Smith and his friends.

number of power looms was at first much smaller, and the machinery was so nearly self-acting that one person easily tended four looms. Moreover, as the work required deftness rather than strength, women and children were employed instead of men, because they could be hired cheaper. The distress among the unemployed workmen was very great. Forbidden to combine openly, they did so secretly in dark conspiracies to wreak vengeance on their enemies, as they gradually conceived the class of employers to be, and especially upon the machinery, which they considered the particular cause of their misfortunes. This was a perfectly natural result of free competition, allowing every man to do as he pleased, at a time when invention was necessitating rapid changes in the economic life of society. Laws were passed against the rioters, punishing machine breakers with death. This did nothing to cure the misery of the land, but was a strong argument to men to endure it. It took Parliament a long time to learn that it could interfere in a way to lessen the suffering of the people.

The great battle of the industrial revolution was fought out in the manufacture of cotton, an industry which has held one of the first places in English economic life. But the same experience, in greater or less degree, was repeated in the manufacture of woolen, linen, and silk goods. The engine applied to the manufacture of iron furnished the blast furnace, and the industry was revolutionized. Here, however, the change was principally one of simple increase, and did not cause suffering; or, rather, if there was suffering it was transferred to other countries, for England had imported a large part of her iron, and now she made all her own and exported to these same countries and others. This relation of England to foreign countries, which were slower to adopt machinery, did much to lessen the suffering of English workmen by deranging the industries of foreign countries rather than her own. To estimate in human suffering the cost of this revolution we should, therefore, have to consider much more than the suffering of Englishmen; but that is enough to appall us.

3. *Transportation.* We have seen that the building of canals had begun before 1760. This received a decided stimulus from the growth of manufactures and trade at this period. The invention of a new kind of turnpike by Macadam greatly improved the roads at this period, and led to the construction of those magnificent highways which are now the wonder and admiration of the American traveler. In 1830 the first railway was opened, and was soon followed by that vast network of railways which now covers the British kingdom. We must not for a moment suppose that this was an undesirable change. Such a development of communication is of immense advantage to all human interests, just as is the introduction of machinery and the perfection of manufacturing processes. But, in considering these advantages, we must not forget that these changes were revolutionary. We have seen how the hand industries were scattered over the country, largely to suit people's convenience who found it difficult to bring things from a distance. But as it became easy to bring things from a distance the balance of convenience turned in favor of concentrating manufactures in certain places where they could be carried on to special advantage and then distributing the goods over the country. Thus not only were the country artisans driven out of business, but certain towns were sacrificed to other towns more favorably situated. It could not be expected that people would understand this and adapt themselves to it. People are slow to believe that things are not going on as they always have done, and so they stick to the old stand or the old way till hunger and desperation compel them to change.

4. *Fluctuations in Trade.* One great advantage of the old slow-going system of manufacture and trade was its regularity. One year was like another, and men's incomes from their work were generally much the same. This was due, not to any peculiarity in the method of manufacture, but to the fact that it was settled and men knew what to expect. Moreover, it dealt mostly with necessities, which are less subject to caprice than luxuries are. But the introduc-

tion of machinery both increased the amount and changed the quality of manufactured goods ; and the improvement in the means of communication and transportation finally substituted a world-market for the earlier local markets. Now, while men can learn to consume almost any amount of goods, and that in endless variety, they learn to do so gradually, because habits are hard to change, sometimes even in the direction of greater indulgence. Moreover, the nature of our industrial organization is such that it is difficult to rearrange social relations which have been disturbed, and the readjustment requires time. Manufacturers had little to help them to decide what and how much to make, especially as the area of their markets increased. If they were careful and increased their output cautiously the demand outran their supply, and high prices encouraged them to extend their business. More workmen were called for, wages were good, and the workmen became accustomed to living well. But now they had gone too far ; goods did not sell, or fell greatly in price ; they had to shut down and wait for better prices, or perhaps failed altogether. And for the wage-earners the years of plenty were succeeded by years of famine. It has been noticed that these fluctuations have occurred ever since manufacture was carried on on a large scale. It is due to the fact that manufacture is carried on with reference to a changing and enlarging demand which it cannot calculate, and also that manufacture itself is constantly disturbed by improvements which cannot be foreseen. The large scale of manufacture itself may not be responsible for the fluctuations except in so far as it is itself responsible for the facts just mentioned. A still larger scale of manufacture hereafter may perhaps bring steadiness in industry. But, whatever the cause of these fluctuations, the effect upon the wage-earner is demoralizing. If he were wise enough to save his earnings during good times, and so have something for hard times, he would not suffer so much. But very few people who live in abundance can do this ; how much less those whose condition even in good times is one of meager comfort !

5. *Pauperism.* We remember the statement of the traveler who in 1760 found among the country weavers "not a beggar or idle person." Looking at the country as a whole, we should say that it was poor, that is, the total wealth was small; but it was so distributed that there was general comfort. The revolution changed this condition of things. Adam Smith urged that free competition would greatly increase the production of wealth. Whether this was true or not it is certain that free competition *and machinery together* did increase the production of wealth immensely. There is reason to believe that this was due in a considerable degree to competition, but it was undoubtedly *largely* due to machinery. Turning, however, from the *production* of wealth to its *distribution*, we find that competition had an immense influence, an influence in part disastrous. While wealth increased at a hitherto unheard-of rate poverty increased nearly or quite as fast. In 1760 the amount spent in poor relief was £1,250,000, while in 1818, after an immense increase in national wealth production, it was £7,870,000. While the population had increased seventy per cent the cost of poor relief had increased five hundred and thirty per cent. Here more than anywhere else fairness compels us to consider other things than the changes of economic conditions. War had something to do with this increase; both the appropriation of waste or common land and the continuance of unwise legislation, made largely with a view to the interests of others than the paupers, contributed to this result. But industrial changes, likewise, had much to do with it. One of the best of modern writers says, in speaking of Adam Smith and the impending revolution: "There were dark patches even in his age, but we now approach a darker period, a period as disastrous and terrible as any through which a nation ever passed; disastrous and terrible because side by side with a great increase of wealth was seen an enormous increase of pauperism, and production on a vast scale led to a rapid alienation of classes and to the degradation of a large body of producers."

SUMMARY.

1. There is a general decrease in the legal restrictions of industrial liberty in England at the beginning of the century.
2. These restrictions had been in the interest of special classes, and had been more and more ignored during the preceding century.
3. The invention of the steam engine, followed by that of the spinning jenny, the power loom, and other machinery, revolutionizes the manufacture of cotton and establishes the factory system. This soon follows in other manufactures.
4. Distress results to workmen; men give place in a degree to women and children; rioting and unsuccessful efforts at legal repression follow.
5. New turnpikes and canals, and, later, railways, revolutionize transportation, with further disarrangement of industry.
6. The great expansion of trade produces fluctuations of prosperity and adversity, greatly enhancing the sufferings of the working population.
7. There was an immense increase of pauperism during this period.
8. Adam Smith's prophecy that unrestricted competition would increase *production* was fulfilled; but it resulted in an unfortunate and disastrous distribution.

QUESTIONS.

1. How and why were the mediæval restrictive laws abandoned? Why did Adam Smith object to them?
2. Why did the invention of the steam engine necessitate the factory system? How did this system differ from the preceding?
3. What was the result of the earlier inventions on workmen? Of the later inventions? What influence on the amount of goods? On their quality? Their price?
4. Do the workmen profit by this? Why? Does society profit? Why?
5. Why do wage-earners often oppose machines? Is there any ground for their feeling?
6. How did railways tend to consolidate industry? Is this consolidation the same as that produced by machinery?
7. What caused fluctuations in trade under the new system? Are fluctuations inevitable under the modern system? Why?
8. Are uneven wages as good for wage-earners as even wages, if the average is as high? If so, why? If not, why not?
9. Why were women and children now employed? What are the objections to this? The advantages?
10. How was increased pauperism possible with increased national wealth? What is wrong when this is the case?

LITERATURE.

See references to preceding chapter; also:

Rand, Benjamin: *Economic History Since 1763*. Chapters II, V, and IX.

CHAPTER VII.

THE INDUSTRIAL REVOLUTION IN ENGLAND—PART III.

The Reaction Against the Passive Policy of Government.—In a truly progressive country all reactions against nominal freedom are new efforts in favor of real liberty; reactions against false liberty in favor of true liberty. What is false liberty? Simply permission to do as you like. This would in some respects be an admirable thing for adults of full normal development if it were not that other people, enjoying the same permission, are sure to do things that you do not like, and thus frequently make it quite impossible to do even halfway as you would like. If men's interests did not clash it would be different; but as it is, the general permission to do as one pleases results in liberty for the strong and slavery for the weak; or, more truly, since the strong are themselves dependent ultimately upon the weak, it results in more or less of slavery for all.

True liberty is not simply the *permission* but the *power* to act freely. We are truly free in our external relations just so far as we have real scope for unhindered action and normal development of all faculties.*

It is plain that if people's tracks cross each other they must occasionally step aside for each other, or get in each other's way, in which case the weaker suffers first and worst. Of course the best possible basis of freedom is to have every-

* This is only a single phase of this important subject. Its complete discussion would require a book. Wise laws, well executed, increase real freedom, although they appear to be restraints. Life in the family and in society seems to impose restrictions, yet actually increases real freedom. External restraint at times acts upon character and frees the mind from evil, thus increasing real freedom. This is a true object of punishment in the family and in the State.

body disposed not to molest, but to assist everybody else at every contact; but men are not yet so disposed. Therefore the law is appealed to to supply the lack of individual wisdom and benevolence. When all men have learned to do spontaneously that which a just law commands the law has done its work, in so far as this is merely repressive, and it is no longer needed; but until then it is needed. Never is law so much needed as when the conditions of life are changing and are imposing upon men new duties which many of them do not see or own. It must be confessed that it is hard to make wise laws at such a time, but even tolerable laws are better than none. Moreover, it may be remarked in passing that while repressive laws may disappear as men improve in disposition, laws of positive constructive nature, designed to furnish norms for guidance and rules for coöperative effort, will surely increase in number and in importance.

We have seen that laws regulating industry were generally repealed during the period we have been considering, and that, despite the commotion produced by the revolution, little attempt was made to replace them. Up to that time the State had, on the whole, increased its regulation of economic life from age to age; but now there was a sudden halt. This was partly due to the feeling that men had really matured enough so that when they came in contact with each other they would respect each other's rights at least more than before; but this feeling had not much to do with the change. The real cause of the movement was Adam Smith's central doctrine that not benevolence but self-interest would regulate men's relations for the general good. It is hardly too much to say that this theory, which has dominated business for a century, implied, if it did not assert, that in the economic world there was little need of a moral law. We have now to consider some of the points in which this theory broke down in practice and men reacted against it.

1. *The Quality of Goods.* In repealing the laws for the inspection of wares it was urged that cheating would not pay, and so would cure itself. It is strange that, though the

principle of "honesty is the best policy" had been known for centuries, men had not become honest. But so strong was the new doctrine of self-interest that men urged that the very inspection of wares by the government was the cause of fraud; for, the government brand being often put on carelessly, men bought poor goods, because of the brand, which they would have rejected if they had examined them. The abolition of the laws would result in each examining goods for himself, it was claimed. It is hardly necessary to say that these hopes were not realized. Nor is the reason hard to see. Men might be trusted to attend to their own interests if they knew enough to do so, but they do not. Who can tell the quality of baking powder, or ground spices, or patent medicines, or many other things subject to constant adulteration? Who can tell whether well water has fever germs or pork contains trichinæ? For these the ordinary buyer's knowledge is worthless; an expert must be employed. Such has been the experience of the English people, and the law now provides for the inspection by government experts of meat and fish, groceries, drugs, butter, and other articles of food. Of course most articles in which differences of quality do not endanger the public health are left to private management, but not all, as for instance, butter in Ireland and herring in Scotland, where the government test is used for convenience. Gold and silver plate are tested, gun barrels, steam boilers, drains and sewers, gas, weights and measures, all on the same general principle that the government, through its expert, must guard people from those serious dangers against which they cannot, or habitually do not, protect themselves. In reality men do protect themselves through government, which represents coöperative effort. They select certain persons to act for them as their agents, and what one does through an agent one does one's self. For every person to attempt to do everything directly for himself would mean return to barbarism. Division of labor and coöperation are a law of civilization.

The theory that men will ruin their business if they cheat,

and so will be deterred from cheating, has been utterly exploded by this great English experiment. It may be true of those long-established concerns whose reputation is a large part of their capital in business; but many a man has perpetrated an audacious fraud upon a country for a few years and retired with a fortune when his cheating began to be known. The inspection of goods by the State is a principle now fully recognized, the only question being how far it should be applied.

2. *The Protection of Labor.* Nowhere was freedom more absolutely demanded than for labor, and nowhere was it more needed. The old restrictions were very galling and burdensome. But what of the new freedom? The introduction of machinery made it possible to employ women and children, as has been said, where men had been needed before. But modern machinery is as destructive as cannon if human life comes in its way; and the destruction of life and limb was appalling. It had been argued that employers would find it to their interest to protect their employees from injury of every kind, but, however that may be, they failed to do it. So scandalous was their neglect that the law had to require by heavy penalties what the simplest dictates of humanity ought to have secured. The employment of young children of four and five years of age, the bad ventilation of factories, working overhours, neglect of education of children, and many other things called for a like interference. It would be difficult to mention a point in which employers could have neglected the interests of their employees where they did not do so. And here it must be noted that free competition fastened upon industry the very evil it promised to prevent. Many employers were humane in intention, but if they went to any expense to help their employees their less scrupulous competitors too often undersold them and drove them out of the trade. Thus competition not only did not recognize, but it did not tolerate, the law of benevolence.

The result of this was a series of acts of Parliament known

as the Factory Acts, beginning in 1802 and culminating in the Consolidation Act of 1878,* which Mr. Jevons, one of the most distinguished of English economists, calls "one of the brightest achievements of legislation in this or any other country." He well adds: "The great fact is that it embodies disinterested legislation; the health and welfare of the people at large form its sole object; no one class or trade is to be promoted, as in almost all the older industrial laws." This remarkable act—"the mere table of contents filling eight pages and the text sixty-five"—cannot be thoroughly stated in a few words. In general it establishes: (1) the fencing in of all dangerous machinery; (2) ventilation and other sanitary conditions in factories; (3) a working day for women and children of not over ten or ten and one half hours; (4) a Saturday half holiday; (5) prohibition of employment of children under ten years of age, and under sixteen years of age unless furnished with a certificate of fitness; (6) schooling for children half of each day or on alternate days; (7) government inspectors to supervise and enforce the law. This last provision is a necessity without which the law would be a dead letter. In contrast with this law, limiting the work of women and children to *not more* than ten and one half hours per day (ten in cotton factories and the like), let us notice the old law of apprenticeship by which a boy must work *at least* from five o'clock in the morning until between seven and eight o'clock at night, with time off for meals, and which punished him with imprisonment if he refused. Is it not plain that the old act was in the interest of employers rather than in the interest of the people?

Extensions of the law and improvements in administration have taken place from time to time, but the first radical innovation seems to have occurred in 1891. By the act of 1891

* Improvements have since been made in English factory legislation, but the Act of 1878 is properly designated as the culmination, as it may almost be called a code of factory law, and contained in itself the more important provisions, and also the germs of what was to follow. It marks an epoch in the history of the wage-earner.

the age at which children could be employed was raised to eleven years. The powers of inspectors were increased, greater sanitary precautions and fire escapes were required, and certain kinds of heavy labor prohibited for women. But the most important feature of this act is an attempt to regulate work done in homes. Employers are compelled to keep a register of those to whom they give out work, and by this means the inspector is enabled to inspect the places where such work is done. This attempt to deal with a most grievous evil is distinctly a new departure, and its results will be watched with interest.

Although the beneficence of these laws is now everywhere admitted, they were bitterly opposed in their earlier forms by most of the economists of the Adam Smith school in Parliament, who claimed that it would injure the interests of the *workmen*. Of course employers predicted ruin. Neither proved to be right. It is to be noted that, except in its general provisions, the law does not protect grown men, but only three classes, namely, (1) women, (2) children, (3) young persons—young persons meaning those under eighteen years of age. Furthermore, being only a factory act, it does not extend to agricultural laborers, a sadly neglected class in England, for whose amelioration interest has been generally awakened only in recent years. The interests of the great landowners, who were strongly represented in Parliament, have apparently prevented action in their behalf.

3. *Trades Unions*. We have noticed the guilds, which played a large part in the history of the Middle Ages. These, however, were not like modern trades unions. They were unions of men who worked, but not exclusively of wage-earners, nor in the interests of wage-earners even chiefly. They were formed of masters. As we have said, however, the modern division into employers and employees scarcely existed. With the development of the wage system, however, there grew up a most natural tendency on the part of wage-earners to combine into unions for protection against what seemed to them the rapacity of their employers. So jealous

had the ruling classes been of the lower classes, who outnumbered them, and might thus endanger their power, that laws against such combinations had been passed at intervals ever since 1304. When these classes found the need of union increasing they were driven to organize clandestinely, and adopted secret violence in lieu of the open methods which were denied them. In 1800 Parliament, finding that unions were steadily increasing, passed a most comprehensive law to suppress them, declaring illegal "all agreements between journeymen and workmen for obtaining advances of wages, reductions of hours of labor, or any other changes in the conditions of work." Under this law many workmen were prosecuted and severely punished, but in vain. The law became so odious that employers were led to pledge themselves to their workmen not to appeal to the law. In 1824 Parliament confessed the law a mistake and repealed previous laws relating to combinations of workmen. Trades unions, thus tolerated, grew at an astonishing rate, but they were still subject to legal persecution of one sort and another. Judicial decisions, especially, were adverse to them. Their efforts were condemned as conspiracies "in restraint of trade;" but in 1875 a law was passed which declared that the purposes and actions of trades unions were not to be deemed unlawful merely because they were "in restraint of trade;" also that acts which were lawful if done by one should still be lawful if done by two or more in furtherance of trade disputes. No provision was made until about this time for the protection of the property of trades unions, and treasurers and others could steal from them with impunity. This protection to their property was at last afforded. They gradually became a powerful factor in English economic life. Whether they have raised wages or not is disputed, it being claimed by the older economists that wages are governed by laws that no direct pressure can modify. The view of most economists of the present day, however, seems to be that trades unions find limits to their power to raise wages in general conditions which, merely as trades unions, they have not created and cannot change, but

that within these limits their power is considerable ; in other words, well-managed trades unions enable wage-earners to avail themselves of favorable circumstances which otherwise might pass unutilized by them. It may be added that few persons, after careful investigation, would be found to deny their beneficial effect on the education and discipline of the laboring classes.

Trades unions have attained their highest development in England; but even in that country the days of their glory seem to be passing away. The recent progress of industry has broken down the barriers between separate trades, and it is easier to pass from one to another, or even from the ranks of unskilled workmen into factories operated by machinery. It is now necessary for artisans and mechanics to organize with reference to those outside of their ranks, if they would protect themselves and advance their industry, or to seek an amelioration in their condition through legislation. This is an explanation of the "new trades-unionism" in England, which strives, on the one hand, to organize unskilled wage-earners ; on the other hand, to secure the assistance of law in the prosecution of their plans.

4. *Regulation of Wages by Law.* The old law had allowed justices of the peace to fix wages authoritatively. This law, of course, went with the rest, as being opposed to free competition in the labor market. Here more than almost anywhere else the new principle was put into operation. We have seen as a first result the employment of women and children instead of men. This was strictly in keeping with the principle of free competition, but it produced the fearful evils which the factory acts were enacted to correct. It was further found that men were often unable to protect their own interests in their agreements with the employers. If higher wages were paid somewhere else they did not find it out, or if they found it out they and their families were attached to the place and could not move readily. So lower wages were paid until the man who paid more was forced by competition to cut down wages. It is

appalling to watch the development of industry early in this century. The limit of wages was bare subsistence, enough to keep the wage-earner in working condition, and in this the employers were apt to calculate below the point of their own interest, not appreciating the value of efficient, well-fed employees whom perhaps they had never known. The complacency with which employers fell back on the law of self-interest is well portrayed by Carlyle, who represents one of them as saying in self-defense: "My starving workers? Did I not hire them fairly in the market? Did I not pay them to the last sixpence the sum covenanted for? What have I to do with them more?" As Carlyle well adds, "We have profoundly forgotten that cash payment is not the sole relation of human beings ; we think, nothing doubting, that it absolves and liquidates all engagements to man." It is here that we discover the fatal weakness of the competitive theory in its dependence upon the popular political error of the day to which we have already referred, the doctrine that "all men are by nature free and equal." If they were, competition would produce better results.

The downward movement of wages the trade unions claim to have arrested and even reversed. Certain it is that wages have risen during the period of their influence. Others claim that the larger wages have been made possible only by the larger production of wealth in our age. This last was a necessary condition, but if the helpless inequality of the laborers while dealing singly with their employers had continued it is not clear that wages would have risen as production increased. The many disputes and bitter quarrels between employers and employees led to legislation which aimed to adjust the differences between them. An act was passed in 1824 to provide for the settlement of existing disputes by justices of the peace or referees. The arbitration was compulsory with reference to the decisions, for heavy penalties were provided which could be inflicted upon those refusing to adhere to them. An act in 1867 established "Equitable Councils of Conciliation to Adjust Differences

between Masters and Men." These Councils were more elaborately constructed, and decisions could be enforced by legal penalties. An act of 1872, commonly known as Mr. Mundella's Act, gave power to make settlements with reference to the future as well as to settle existing disputes. These acts give recognition to the principle of legal regulation of controversies, but they have up to the present not been used. Voluntary boards of conciliation and arbitration, on the other hand, have proved most salutary in England. Social action has in that country, as elsewhere, been found necessary to preserve industrial peace.

The last three chapters are a brief sketch of England's attempt to deal with a new economic theory and a new economic power. The new theory was industrial freedom, competition; the new force, steam and invention. Both were relatively unknown before. The new theory proposed to do without benevolence in men or interference from the State, and promised immense increase of wealth and harmonious and equitable distribution of it among the various parties to its production. Both proposals were assented to; were both promises fulfilled? An immense increase in production did take place, due in part to competition, more to machinery. But the distribution of this wealth, growing directly out of the principles of competition so long as they were unrestrictedly applied, was such that poverty grew faster than wealth, and the laboring population of the realm sank day by day into deeper distress and degradation. The partial benevolence of employers, which would fain have mitigated this disaster, was, as a rule, neither welcomed nor tolerated by the competition which had made itself law. Not until this benevolence was formulated, generalized, and enforced by disinterested legislation was the horror of the situation diminished. When we hear the principle of "a fair field and no favor" and "no State intervention" advocated by a man strong in the consciousness of personal advantages (for such he is sure to be) we must remember that he is a century behind his time, and that he has not read or has not profited by one of the most dolorous

chapters in human history. The English nation, after a trial of free competition and no interference, as thorough as could well be made, has undeniably returned to the principle of governmental activity which she had abandoned—a principle which recognizes as the function of the State the protection of the citizens and the furtherance of their material and social well-being, by every law and every activity which offers a reasonable guarantee of contributing to that end.

The three words which have become the motto of the French Republic, "Liberty, Equality, *Fraternity*," may be found on the public buildings of France. These three words likewise convey the spirit of the Declaration of Independence. If the aspiration expressed in the motto is ever realized it will be because liberty is defined and equality secured by fraternity; it will be because benevolence as well as competition will rule the economic actions of men; also because social readjustments will render our neighbor's interests more nearly our own. It is a matter for regret that for so long a time England and America tried to omit the last and greatest term from the trinity of this new social creed. The theory of the past century erred in its central assumption that men were equal. The Creator of the universe, for reasons presumably wise, has made impossible an equilibrium of balanced selfishness among men.

SUMMARY.

1. Liberty, to be effectual, is found to require mutual limitations.
2. Expert examination of certain goods is found to be necessary.
3. The employer's interest fails to protect employees from bodily injury.
4. The English Factory Acts protect the interests of women, children, and young persons employed in factories, specifying the time and conditions of their employment.
5. Trades unions, at first forbidden, are permitted in 1824, and rapidly developed. They powerfully affect the conditions of economic life in England.
6. They now seek to organize unskilled laborers both in city and country, and to secure the aid of legislation.
7. Legal boards of arbitration are established, but not used.
8. Voluntary boards of arbitration are widely employed with beneficial results.
9. The principle of non-interference of the State is abandoned as a principle in England.

QUESTIONS.

1. What is liberty? What is its counterfeit? What is the result of general permission to do as one pleases?
2. Is there less or more need of law as society develops? Why? What change takes place in the character of law as civilization increases? Why?
3. What need is there of State supervision of commerce? Is it necessary in all lines? Why?
4. Is self-interest a guarantee of honesty? Why?
5. Did competition protect workmen from injury? Why?
6. What are the provisions of the English Factory Acts? How do they contrast with former labor legislation? What are their defects? Why?
7. Why were trades unions at first forbidden by law? What was the result? Why was the prohibition removed? What results followed?
8. What was the attitude of the earlier economists toward trades unions? Why? Of the later economists? Can they affect wages? How much?
9. What is "new trades-unionism?"
10. How were wages formerly regulated in case of difficulty? Did competition regulate them successfully? Why?
11. What modern means of regulation? Which kind is more used?

LITERATURE.

Brentano, L.: *On the History and Development of Guilds and the Origin of Trade Unions.*

Trant, W.: *Trade Unions.*

Seligman, E. R. A.: *Two Chapters on the Mediæval Guilds of England.* American Economic Association. Vol. II, No. 5. (Contains a bibliography.)

See also references to preceding chapters.

CHAPTER VIII.

REMARKS ON THE ECONOMIC HISTORY OF THE UNITED STATES.

THE economic history of the United States is, in part, the history of an attempt to apply the principles of free competition and a minimum of interference on the part of the State to a new country instead of an old one. This difference is so great as to have modified the result materially. As is well known, the principle of non-intervention was adopted here more widely than in England, where the State has never ceased to exercise a certain control over religion. Politically and economically, also, the principle of no State interference beyond what is absolutely necessary was in the main recognized for a time. In some particulars the results have been parallel, in others not. There has been the same, perhaps an even greater, increase of wealth-production, with a concentration of wealth which is without parallel in modern times—which means the growth of great fortunes—the same extension of commerce, development of railways, and introduction of machinery. In the most important points, however, the darker side of England's experience does not seem to have been fully repeated here. We have never known such low wages, such extended poverty, such suffering and starvation on a large scale. Real wages are said to have risen gradually throughout our history, and this, with numerous exceptions, may not be far from the truth. Our experience, therefore, has, at first blush, not seemed to condemn a passive policy of government so strongly as has that of England. The question, therefore, naturally arises whether the conclusions drawn from English experience were correct. Which of the two countries has given the principle the fairer test?

It will be remembered that the suffering accompanying the industrial revolution in England was of two kinds. One was temporary or transitional, the other was permanent or inherent in the system. The first was due to the simple fact of changing. No matter what the change might be, if it were equally sweeping and rapid, suffering could scarcely fail to result. Thus a new method was introduced, and those who practiced the old must lose their occupation and income. Not seeing that the change was coming, they did not adapt themselves to it, and were sacrificed to it. Trade drifted from the country to the town, and from one town to another, the retreating wave leaving many helplessly stranded.

The second kind of suffering came not from change, but from the very nature of the system introduced, from the sacrifice of the weak to the strong in the soulless struggle for existence. This lowering of factory wages and degradation of factory operatives would, apparently, have happened just the same if the system had come in ever so slowly or had existed from the first. Now both these difficulties in our economic experience have been offset by features peculiar to our country as compared with England.

Difficulty of Transition.—This was slight in America, because in changing to the new system there was little to change from. Our economic littleness was our salvation. Our industries were scarcely started when the steam engine was introduced, and so from almost the beginning the factory system seemed the natural one. Such change as there was from hand industries to power manufacture produced results similar to those in England; but this change was relatively so insignificant in amount as to attract comparatively little notice. Moreover, the artisans thrown out of employment found new employment in the growing industries and moved willingly from place to place, as English artisans did not do. This was due to local causes. Thus the change which in England was a *revolution* in America was an *evolution*, a process that built much and destroyed little, because there was little to destroy.

Difficulty of Operation.—The workingmen of this country seem not to have played a continually losing game, as did their English cousins, during the period of unlimited competition. The reason is in a way the opposite of that just considered. If the littleness of our industries has saved us from the friction of transition the bigness of our territory has saved us from the friction of operation. The American workman, either by immigration hither or by the inheritance of traditions that are national, moves about quite freely in search of his own interests. Through our industrial history to the present he has been able, by going a reasonable distance, to find cheap or free land where he could earn an independent living. Under such circumstances it has been impossible for the pressure of competition to work out its natural results in manufacturing industries. It is free land rather than a protective tariff which has kept up the wages of labor, and if that resource, which has thus far tempered the asperities of the struggle, once disappears we may look for different results unless new safeguards take its place. It is, of course, objected to this and many previous statements that wages are determined by the product of industry divided according to immutable laws; to which it may be replied that even if this theory of "immutable law" be true—a very doubtful "if"—it holds only as a contract holds which divides the profits of a partnership, a division which is in nowise certain to be realized if some of the partners are unable to interpret the contract. There is no conceivable expedient by which the weak and ignorant can associate with the strong and unscrupulous without increasing detriment to the former, unless strength and disinterestedness from without interpose efficiently and permanently in their behalf. Favorable as has been the situation of the United States, her economic history furnishes abundant illustrations of this fact. As free land becomes less abundant and less accessible the wage-earning portion of our eastern population finds conditions of life forced upon it which at least hold down if they do not lower the standard of life. Pauperism is undoubtedly

increasing with the increase of wealth, and extremes of condition and alienation of classes are familiar to all. Riots that call for military interference testify to the fact that we have not escaped, and are escaping less and less, the friction that accompanies all unfraternal arrangements among men. Between the two experiments, therefore, we cannot for a moment hesitate as to which has fairly tested the system. All countries tend to fullness, and newness always disappears in time. That system which will not work in a thickly settled country is a condemned system, for it fails to work under what are now generally, and will soon be universally, the normal conditions of human life.

Competition among Employers and Centralization.

—We have so far considered the effects of competition upon the laborers, and in tracing this effect the history of England has been peculiarly instructive. When we turn to the results of competition upon the employers we shall find that the history of our own country is more conclusive. Owing to the peculiar circumstances of our situation the results of competition among employers have been developed more rapidly than abroad. While the conflict between workmen and employers led to a certain feeling of common interest between the latter, and frequent combinations among themselves for mutual protection against workmen (combinations which the English law never prohibited), the principle of competition made them perfect Ishmaelites in their relations with each other. If they could undersell each other or outdo each other, by any means recognized in the very flexible code of business honor, they did so. One of the saddest things about the history of oppression of labor, which we have been considering, was the fact that often when employers were dictating ever-harder terms to their men they were themselves crowded to the wall and compelled to fight for existence by the merciless competition among themselves. Oppression thus necessitated oppression. Of course the general public, including workmen, stood at the end of this series and profited by the lower prices; but in such a series

the lowest term suffers most and profits least by the reduction. The employer's position, however, not infrequently was such as to appeal to sympathy.

In America, where no old system had existed to establish conservative traditions, and where the acquisition of wealth has been a far more distinctively national passion than in England, the law of competition has operated far more fully among employers than it has in England. The resources which have so mitigated the lot of the employee have not been available for the employer. Enslaved by fixed investments of capital, he has had to fight out to the end this war without quarter. In every such warfare the number of combatants tends to decrease. In spite of the enormous growth of our industries and population, a growth which continues with unparalleled rapidity, the number of competitors in many industries, though greatly increasing at first, has of late shown a remarkable decrease. In 1870, according to the United States Census, there were in the Southern States 175 concerns engaged in the manufacture of iron and steel, with a capital of \$13,372,085 and an annual product of \$21,472,665. In 1880 there were 218 firms, with a capital of \$29,145,830 and an annual product of \$25,353,251, an increase of 24.6, 118, and 18 per cent respectively. In 1890 the capital had increased to \$50,845,666, or over 74 per cent as compared with 1880. The annual product had increased to \$42,590,822, or about 68 per cent. *But the number of concerns had decreased to 145, or over one third.* The woollen manufacture presents a still more striking example. According to the census there were in the United States, in 1870, 3,590 concerns in this business; in 1880 the number was 2,689, and in 1890, 2,503. In spite of this decrease, the amount of goods manufactured increased in the last decade over one fourth, and the capital employed in an even greater degree. The illustrations we have chosen are good types of the industrial progress of the country. Competition attained its maximum in the decade between 1870 and 1880. It became familiarly known as "cut-throat competition," and but for the existence

of free land, unworked resources, and the constant increase of inventions, widespread disaster must have resulted. Since then the number of competitors who have been forced out of the struggle has steadily increased and business has fallen into fewer and fewer hands. This *centralization* of established industries has been much more rapid in America than elsewhere, due primarily to the absence of hampering conditions, especially to the lack of legal restraint, which has characterized our economic history; also to the presence of conditions positively promoting centralization, like the favoritism which has been shown by railways to a fortunate few. Thus the fruit of the system is ripening sooner than elsewhere.

Monopolies.—The centralization of which we have spoken is only a partial one. It does not necessarily lessen competition at all. It only gives the business into the hands of those competitors who are best able to continue it under the rigorous conditions which competition has imposed. Other things being equal, the large concerns have the best chance, and so the tendency is more and more to give them the business. This seems plainly a reasonable thing to do, and up to the time we have mentioned, some fifteen or twenty years ago, there was a very general belief in the efficiency and sufficiency of competition to control all industries. Horace Greeley even urged that it would be advantageous to turn the business of the post office over to the express companies and thus subject it to the great law of competition. But experience has shown that under certain circumstances competition ceases altogether and abandons its beneficent control. *This makes a monopoly, which is nothing else than a business not limited by competition.* A monopoly results whenever one competitor enjoys certain advantages which the other competitors cannot obtain, and the process of competition goes on far enough to drive them from the field. This advantage may be *natural* or *artificial*, and accordingly we have natural and artificial monopolies. Artificial monopolies usually depend on some favoritism of

legislation or of great corporations like railways, or sovereign power shown to special individuals. Such were the rights of exclusive manufacture or trade in certain commodities granted by monarchs to their favorites. These were one of the most hated features of the old system against which Adam Smith and the men of his day rebelled. Tariff laws are sometimes so framed as to favor certain individuals, under the guise of general rules, and thus form the basis of monopolies. There is generally very little excuse for artificial monopolies save in the case of patents, copyrights, and the like, and of course they can be terminated by removing the artificial prop which supports them.

But natural monopolies are a different matter. We cannot legislate away the inequalities of nature in such cases. The growth of natural monopolies has of late years been prodigious. Without trying to make an exhaustive list the following monopolies may be mentioned as having assumed national importance. First, the railways are at least partial monopolies, and their residual competition is constantly diminishing. Great commercial cities like Chicago and New York are connected by several lines, and at times a fierce struggle breaks out under such circumstances, but an agreement is soon reached and the minimum of competition remaining relates to quality of service rather than to price. Even the competition in quality is less than is often claimed, affecting chiefly a few through trains. But the great majority of people in the United States are not situated like the residents of New York and Chicago. Smaller places are often connected with larger places and with one another by a single line, and do not have the benefit of even the minimum of partial competition which exists elsewhere. The power of railways left to themselves is almost unbounded, far greater than that of any sovereign. By far the larger number of towns in the United States are on one line of railway only, and even if all were on more than one line of railway the ultimate result would be combination and monopoly.

Instances are numerous where railways have so regulated

rates as to kill one town and build up another as they saw fit. In the West they have built grain elevators, allowed no private elevators on their track or charged exorbitant rates for private shipments, and thus compelled farmers to sell grain to them at their own price. They have put up and overthrown manufactures as they chose. So great has become the importance of transportation in our day that the control of it by a monopoly is the most far-reaching tyranny now made possible by our economic life.

The second important group of natural monopolies with which we have become familiar consists of those which we may know as the centralized branches of municipal supply. These are city water works, city gas works, electric lighting plants, street-car lines, and possibly others. That these industries are monopolies by nature was not at first clear, but now it is generally admitted. For instance, though there may be several street-car lines in a city they cannot be in the same street and cannot compete to any considerable extent. Competing gas and water companies may exist in the same city and lay parallel systems of pipes, but the cost of such a system of pipes with a central plant is so great that the interest on the capital thus invested constitutes a very large part of the cost of gas and a still larger part of the cost of water. So, when two plants are put in to do the work of one, the increase of cost is so great that it more than balances the gain from competition. Competition in such cases is therefore justly regarded as out of the question, and rival companies never long compete in good faith.

The third group of natural monopolies consists in the centralized control of great natural treasures. The principal examples are the Standard Oil Company and the "Coal Combine." These two monopolies control almost completely the price of two important commodities. It is to be noted that both these monopolies owe their existence in the first instance to the previous monopoly of railways. Natural gas also may be instanced as an illustration following under this head.

In addition to these monopolies, which plainly have a natural basis, there has been of late a remarkable movement toward the formation of monopolies in other industries which have become highly centralized. When an industry has fallen almost entirely into the hands of a few large and ably managed concerns these have united in an agreement not to compete with each other in the matter of price. They have usually limited the amount of the total output and assigned a certain quota to each concern. These combinations, variously known as pools, combines, and trusts, according to the method of their organization, are a matter of great interest, and, it must be confessed, of considerable anxiety in our own day. So long as they last they constitute real monopolies and regulate prices wholly in their own interest. There are those who claim that all industries will become monopolies if competition is unchecked; that competitors are never long equal, and that the first result is bound to be centralization and the final result monopoly. The instability of most pools and trusts up to date gives little warrant for such an assertion. Experience beyond what we now possess is necessary to decide. All we can now say is that certain industries, by virtue of natural inequalities necessarily existing between the competitors, if left to the control of competition, inevitably become monopolies, while others find it seemingly impossible to escape from the control of the competitive principle. While it is difficult to draw the line between these two kinds of industries they seem none the less to indicate the existence of two separate industrial fields, the monopolistic and the competitive, requiring different principles of control.

SUMMARY.

1. Non-intervention in its extreme form became the early policy of the United States.

2. The transitional suffering which accompanied the industrial revolution in England was avoided in the United States by the fact that industries were but little developed under the old plan.

3. The tendency of the new system to depress wages was prevented by the competing presence of free land, and by the greater mobility of American labor.

4. On the other hand, competition among employers has been severe and often self-destructive, resulting largely in consolidation.

5. The development of monopolies based on natural or artificial advantages has been a marked feature of our industrial experience.

6. These are chiefly in transportation, collective municipal service and natural treasures, with a suggestion of possible monopoly in other fields.

QUESTIONS.

1. In what respect has private enterprise had freer scope in America than in England? Its results on labor? Why? Will these results be permanent? Why?

2. Why has competition among employers been freer than in England? What has been the result?

3. What constitutes a monopoly? What is the difference between a natural and an artificial monopoly? Mention examples of each. Classify the former.

4. Is general manufacturing and commerce liable to become monopolistic? Why?

LITERATURE.

Ely, R. T.: *Labor Movement in America*.

Rand, Benjamin: *Economic History Since 1873*. Chapter XV. This chapter contains four reports made for the Tenth Census by F. A. Walker, Carroll D. Wright, Edward Atkinson, and James M. Swank.

CHAPTER IX.

TENDENCIES TO REACTION AGAINST A PASSIVE POLICY OF GOVERNMENT IN THE UNITED STATES.

WE have seen that the misery and degradation of the wage-earning classes which led in England to the reaction in favor of an active policy of government did not at first exist in the United States to so great an extent as to require and secure legislation in their behalf; but soon similar conditions led to like results, and in most of the commonwealths of the American Union we have now a considerable body of factory laws for the protection of the wage-earning classes and for the promotion of their interests. Massachusetts leads the country in this respect, and the factory legislation of this State is probably surpassed only by that of England. The growth of factory legislation in our country illustrates the principles already stated, for it follows the lines of industrial development spreading from New England to the West and the South, but more slowly in the latter direction.

Nor has the adulteration of foods or the falsification of wares ever received any such attention as in England, though here there has been need enough surely. Not only have we become painfully familiar with the style of goods which the competitive system always produces, and which in England are known by the expressive term "cheap and nasty," but dangerous adulterations are as common here as anywhere in the world. The fact that the theory of non-interference was not so completely broken down by the pressure of labor interests, together with the general weakness of our administrative system, accounts, in part, at least, for the general reluctance to intrust to government in this country the duty of inspecting wares and products of manufacture. But the recent growth of monopolies has been a problem calling for earnest thought

and revision of opinion. Of course the objection to monopolies has been that they were able and inclined to regulate prices entirely for their own interest. Even this would have been less objected to if the employer, thus relieved from the necessity of forcing down wages, had been careful to divide the profits thus increased with his employees. But the schooling obtained in the great struggle which had made monopoly widespread was not of a kind to make men "tenderly affectioned one to another," and the increasing size of manufacturing concerns had hopelessly separated the two classes. It has clearly not helped the wage-earning classes that profits have been increased by monopolistic control. The same could be said of other important interests. Never was industry more careless of life than under monopolistic control. The greatest of our monopolized industries, the railways, in 1892 sacrificed the lives of over seven thousand persons, a number almost incredible to one accustomed to the legally enforced precautions of European countries. Far more employees than passengers were killed; and the lives of most of them, and of many of the passengers and other persons killed, might have been saved by the adoption of safeguards perfectly well known, and not adopted, simply because of their cost.

The history of our attempt to control monopolies is long and confusing. In general, however, three methods have been employed—competition, government regulation, and government ownership. Let us notice briefly each of these methods.

Competition.—This was the favorite method of dealing with natural monopolies so long as competition was regarded as the only safeguard of industry. It has been tried especially in railways and in gas service. We may say, in a way, that the history of our railway business is the history of competing lines which have tracked each other across the country, endeavoring rather to overreach each other than to serve the public. While we can safely assert that but for the rivalry of competing roads the enormous fixed invest-

ments of our railways could have been much better distributed for the service of the country, it must be admitted that the competing lines thus constructed have often served different *local* interests, and they have been constructed according to the dictates of competition. But it is not this competition which is significant under the heading of this chapter, for this was not an abandonment of the principle of competitive control, but an avowal of it. Not so, though, with certain cases like that of the West Shore Railway in New York. This was built almost absolutely parallel to the New York Central, whose monopoly of the carrying trade of central New York it was designed to check. To insure this object the charter provided that it should never sell out to the New York Central Company; that is, it should forever compete with it. Let us notice the real nature of this provision. The doctrine really at the bottom of the whole was that the State should not interfere with private enterprise, but should allow free competition to regulate prices. But, free competition having failed in the case of railways, the State seeks to establish *compulsory* competition, which is as direct a form of State interference as well could be. But so strong is the faith in competition that the State, having decided to interfere, does so through the *form* of an *artificial competition*, the most expensive and least efficient means that could be devised; expensive because the public were compelled at once to suffer the complete loss of the needless railway and ever afterward to pay charges high enough to cover interest on the larger capital. The State thus sought by increasing the *cost* of transportation to lower *profits*, whereas the real object to be obtained was lower *charges* and better service, both of which were prevented by the building of the new road. So much for the economy of the method; now for its efficiency. After it was opened for a few years the road was *leased* to the New York Central Company for four hundred and seventy-five years, and has since been run as a needless fifth track to their four-track road. Competition is postponed until the expiration of the lease. The same

experience has been continually repeated in the case of gas service. Cities oppressed by monopoly have eagerly welcomed a new company which has torn up their streets and inflicted on them great inconvenience to lay a second system of gas mains, hoping thereby to get competitive prices. What has been the result? After a brief pretense of competition, rather, indeed, industrial war, the new company, whose purpose from the first had only been to force the old company to divide its monopoly profits with them, has consolidated with its rival, and prices are as high as before, with this important difference, that before they would admit of great reduction by legal enactment, while now they *must* be high to pay interest on the capital so needlessly increased. We may lay down the general maxim, deduced from our national experience, that *the public must pay for every article needlessly duplicated in monopoly service, and that, too, without compensating benefit.* So thoroughly has this method been discredited by experience that laws have been proposed in certain States forbidding the construction of needless competing railways as resulting in a loss to the public. Professor Jevons claims that English railways could carry passengers in first-class cars at one cent a mile (the present rate is three and one half cents) were it not for the wastefulness with which they have been constructed under the system which we have been considering, and, doubtless, much the same could be said of our own.

Government Regulation.—We have already seen that the system of enforced competition is a species of government control by clumsy and costly means. It is a sort of compromise between new necessity and old tradition, a sort of compulsory freedom with most of the losses and few of the gains of either system. From this half regulation we now pass to the avowed application of the principle of State control. This began on a considerable scale more than twenty years ago, at the time of the granger movement, as it was called: at first an uprising of unorganized farmers against railway claims and abuses; later, an organized move-

ment which centered in the "Order of the Patrons of Husbandry," an organization of farmers, founded in 1867. Laws were passed in a number of States regulating rates and binding the roads by many rules of action. Much of this legislation was ill-considered, passed under pressure of popular excitement, and soon repealed. One unfortunate result was the discouragement, for a time, of further attempts at regulation of railway traffic. Since then, however, the effort to control railways by legislation has steadily increased in strength, and has resulted in the creation of the State railway commissions in most of our States and of the federal interstate commerce commission, with certain powers of adjudication and control. The application of the principle, however, has proved exceedingly difficult. The railways have endless ingenuity at evasion and large power of retaliation. They so generally cross the State boundaries that State laws are of comparatively little effect. No more troublesome question of practical legislation now confronts our people.

The principle of municipal control has resulted even less satisfactorily. Very seldom have equitable prices been secured, while the corruption of city councils by monopoly money has been notorious. Thus the enormous needless cost of various municipal services has often been divided between illegitimate profits and still more illegitimate bribes. The "Broadway Street Railway" franchise in New York is still fresh in memory. The councilmen were bribed to give away a franchise worth an immense sum, and, though the criminals were punished, and the fraudulent charter nominally revoked, by a legal decision the franchise and all assets of the company were turned over to the directors to be administered for the benefit of the stockholders, and the effect was practically nil. This decision of the New York Court of Appeals, it ought to be said, has often been called in question, and it is to be hoped that it will not be followed by other courts. This episode illustrates the great weakness of the system of municipal control, a corrupt council having

power to perpetuate indefinitely the mischief they do. Here, if anywhere, "the evil that men do lives after them." On the other hand, it is equally true that honest councils have often exerted their power wisely and secured bargains reasonably advantageous to the city. Still, the most sanguine advocate of municipal control, as opposed to municipal ownership and management, would hardly claim that our experience in this respect has been satisfactory.

Government Ownership.—This principle, which has been extensively adopted in European countries, has, with exception of the post-office, been applied in our own only to municipal monopolies, and that to a limited degree. It is now the generally recognized principle for the management of city water works. Why it should be applied here more than to other branches of the municipal service is not clear. It is, to be sure, the most essential of all, and the necessity of a supply that shall be abundant, constant, cheap, and pure imperatively demands the most efficient and reliable management possible. It is significant of the growth of popular sentiment that this necessity has led cities generally to resort to municipal ownership to secure this result.

Municipal gas works now exist in a number of American cities and are regarded with increasing favor. The most rapid extension of this principle, however, comes in the case of electric lighting plants, which are now being introduced throughout the country. Very many cities have adopted the principle of municipal ownership, and the tendency to do so increases. Without anticipating here the discussion of this principle, which belongs in another place, it may be said that the reduction in expense to those cities owning their own plants has been very great indeed, while up to date few, if any, cases of failure or mismanagement seem to have been reported. The means of bribery and the occasion for it seem to have been largely reduced.

As a result of the century's experience present opinion seems to tend toward—

1. Private enterprise in the competitive field.

2. Government ownership in the field of monopoly.
3. Right of private organization for all legal purposes.
4. Government regulation of private industry to protect the life, health, education, and general welfare of workmen.
5. Government arbitration, if needed, to settle labor disputes.

SUMMARY.

1. The enactment of factory laws in the United States has been less general than in England, but not inconsiderable, especially in some States.
2. The testing of foods and other products in America has been generally neglected.
3. Monopolies have, on the contrary, attracted much attention.
4. State encouragement to competition in the case of natural monopolies has been a disastrous failure.
5. Government regulation of monopolies by law has been tried with but partial success, especially in the case of municipal regulation.
6. Municipal ownership of local monopoly services has proved more satisfactory, and is increasing in favor.

QUESTIONS.

1. Against what features of our industrial system has there been a reaction? Contrast with England?
2. What is the result of competition as a means of controlling natural monopolies? Why?
3. What effort has been made to control railways by legislation? With what result? Why?
4. What is the difficulty of municipal control of collective services? Why must this be so?
5. What new principle has this difficulty developed? Where has it been most extensively applied? To what branch has it been applied in the United States? What are its results? Why?

LITERATURE.

Ely, R. T.: *Problems of To-day.*

See references to preceding chapter.

CHAPTER X.

THE NATURE OF THE SUBJECT OF ECONOMIC STUDY.

WE began this book by saying that economic history was the history of man in his efforts to get a living; that is, to get and to use material things to supply his wants. It would have been easy to begin at once to define the subject and lay out the principles of our science, instead of going so much at length into the history of economic effort; but we should have missed some important points or been in danger of missing them to some extent. The things which science learns from history can usually be duly impressed upon us only by the study of history. In a way we may know the results of human experience without history, but to follow that experience with something of attention and sympathy adds a new and deeper quality to our knowing. What facts, then, are especially worth noticing as we follow this age-long struggle of man to get a living?

1. **Economics Treats of Man.**—In the first place, we should note the importance of *man* in contrast with all the *things* we have been considering. This seems a very commonplace remark, but the fact is, men who have studied this science have often not appreciated this fact at all. Among the most serious mistakes is to consider man simply as a *producer* of goods, one "*by whom*" are all things of interest to our science, while the infinitely greater truth is that man is the one "*for whom*" they are all produced. Of course no one denies this truth, but men might almost as well deny it as to leave it out of account. The result of such neglect is that men devise with great skill rules by which man may be made the best possible manufacturing machine. It sometimes quite escapes the notice of these

wise men that in making of man the best possible manufacturing machine they may make him a very poor sort of a man; that in teaching him to supply his wants very bountifully they may prevent his developing and correcting those same wants. They forget that there are two kinds of poverty, one a lack of goods for the higher wants, the other a lack of wants for the higher goods. To become rich in goods while losing at the same time the power to profit by them is unfortunately one of the commonest retrogressions in human experience. We do not mean that the whole problem of human development is the subject of economics, but simply that manhood, rounded human development, is the goal of all social sciences, and none must consider their subject so narrowly as to exclude that object.

Another common mistake has been to regard as of chief importance *a class* of men in their efforts to get a living, especially the employer. Other men were treated simply as "a factor in production." An English writer speaks of dear labor as one of the chief obstacles to England's economic prosperity. Could anything be more utterly an oversight of general human well-being? Dear labor should be the very *goal* of England's economic effort, for that means abundant supply of the wants of the great mass of her people; and the fact that labor is dear, so far from being an obstacle to prosperity, is the very proof and substance of that prosperity. Our glance at history indicates that men have made these mistakes not only in theory but in practice. Industries have been developed to majestic proportions while man was sinking into deeper degradation; wealth has grown at the expense of that human *weal* in whose service it won its name.

2. *Economics Treats of Man in Society.*—This is another truism which only history can make true to us. We have seen as we pass from the savage and cannibal, up through all the stages of development, an ever-increasing interdependence among men. Man is least dependent when he wants least, cares least, has least, knows least, and is least.

With every betterment of condition and character he is more dependent than before, more dependent and yet more really free. The beginnings of barter are a confession of mutual need; the coining of money is a declaration of *dependence* to all men. We look with pride upon a century of progress, but that progress has consisted in little else than a growth of dependence, an ever-increasing departure from that rude kind of literal self-help in which each one does everything for himself. Our fathers drew water, each for himself, in "the moss-covered bucket," while our mothers dipped candles for the evening's light. If one was negligent the rest did not suffer. To-day a network of pipes radiate from a common center to enter a thousand households. An engineer makes a blunder at the station and thousands are in darkness or drought. Society is an organism, and that increasingly. Progress is nothing other than the building of the organism called society out of the atoms called men; a passage from independence to dependence, from distrust to confidence, from hostility to amity, from helplessness to helpfulness, while the great law of social solidarity gains ever-increasing importance. Our science, then, is interested wholly in man in his relations to others, not at all in man by himself. Moreover, as a science which studies the present, in order that it may predict and prepare the future, discovering that interdependence is the law of progress, it must not hesitate to shape its principles with reference to a solidarity which shall grow more rather than less, stronger rather than weaker.

3. Economics Treats of Man as in Process of Development.—Few truths are more easily admitted or more persistently ignored than that of change in human life and condition. History makes it real. Man now wanders about by force of necessity and age-long habit, now starves rather than be moved from his home. Land is now free to all, now parcelled out with well-nigh absolute right of individual possession. The seemingly eternal features of the social structure are gone in a few generations. Nothing so invalidates

theories, laws, general principles, institutions, and enterprises as this great law of change of which we seldom take full account. Take, for instance, bequests. Nothing is commoner than for a man to leave a legacy under specified and detailed regulations, binding for all time. One leaves money to endow a religious service in a language which in a few generations no one understands; another founds a college to teach certain doctrines which in a century no one believes; and so on indefinitely. These and a thousand other laborious efforts of statesman, warrior, or philosopher quite lose their worth for the future because their authors assumed that the future would be like their present.

This was the mistake of the early economists. They discerned, often with great clearness, some of the forces *then* at work in economic life, and correctly measured their influence. But while some of these were fundamental and permanent others were scarcely more than the accidents of their day. Thus work which was exceedingly well done had soon to be undone, and was the source of persistent fallacies. Especially must we remember that the magnitude and present importance of an institution argue little as to its permanency. The wages system and the division between capital and labor seem rooted in the constitution of society, but they are scarcely over a century old as a general system.

We may properly study economic life in a temporary and local stage of its development *if we recognize it as local and temporary*, and do not generalize from it for other times and places. Such a study is a *static* or *standing-still* study, and bears much the same relation to the whole subject as an instantaneous photograph of a crowded thoroughfare bears to the life of the street. If, on the other hand, we study economic life in its changes, determining the laws of those changes and their direction, we have a *dynamic* science, or a science of forces *in action*. It is as though we followed up the men on the street day after day until we know who they are, where they come from, where they are going to, and what is likely to come of all their doings. It is a harder

and more valuable study. One object of introducing the study of history into that of economics is to change it from a static to a dynamic science.

4. **The Laws with which Economics Deals.**—The question is often asked whether economics is a science based upon natural law. Such questions in their nature are sometimes largely questions about words. What do we mean by natural law? In the narrowest sense natural laws are the habits of nature which know absolutely no variation. Such are gravitation and chemical affinity; and the sciences based upon such laws—astronomy, physics, and chemistry—were the first to develop, and have attained a maximum degree of exactitude. The term science is sometimes used in a way to imply only sciences of this character. These sciences are more properly known as *exact* sciences, and they are characterized by the fact that the relations with which they deal can usually be expressed quantitatively, that is, in terms of mathematics.

When we come in contact with life, however, and especially with its higher forms, the exactness with which an astronomer predicts an eclipse or a chemist anticipates a reaction becomes impossible. Not that life is without laws; very far from it. There is, in the first place, the basis of physical nature, with its perfect regularity, upon which all life rests and to which it must conform. Then, too, there are laws governing life directly and pertaining to it. These form the subject of the group of sciences known as biology. We must remember, however, that all we can say of natural laws is that they are *habits*, not *compulsory necessities* of nature, and the laws of life seem to differ from those of inanimate nature in that they are not quite invariable habits. Variability seems to be inherent in life, increasing as life rises in the scale of development. It is often assumed, to be sure, that these laws are as invariable as any other, and that this seeming variability is only a greater complexity which we do not yet understand. However that may be, the result is the same for the present. The sciences of life are

not exact or mathematical in the sense we have defined. We must further note that in so far as a science deals with facts which seem to be governed by no invariable law, or whose law has not been discovered, it must content itself with a *description* of this part of its subject. Thus we have the term *descriptive science*. We might better speak of the descriptive part of a science, for all sciences are able in part to reduce their facts to law.

What has been said of the sciences dealing with life applies to an even greater extent to those sciences which deal with man. It is perfectly true, of course, that within certain limits man is governed by absolutely invariable laws. He is as much bound by gravitation as anything else, and if he falls over a precipice we can predict the results as certainly as though a stone fell over. But, without entering the bog of discussion as to the nature of human freedom, we may safely assume, for practical purposes, that man is also, within certain limits, a law unto himself. Nowhere do we find an element of variability so great and so seemingly ultimate as here. We must remember, therefore, that the sciences which deal with man deal with a being who is modified by his environment, *but who has the power of modifying that environment by his own conscious effort*. Let us consider very carefully what this means. It does not mean simply that man modifies his environment *because* he has been modified by it and so reacts upon it, just as things do when they come in contact. If we accept this view we shall come to Mr. Herbert Spencer's theory of natural selection. The forces at work accomplish their own results, according to this theory, whether man will or will not, simply by natural action and reaction. This implies that man is modified by his environment, and that he in turn modifies that environment *without conscious effort*. This theory is based on an assumption that man has no power of *initiating* an influence, and consistently concludes that social development, like geological development, must be left to work itself out. Mr. Spencer, however, goes farther, and stoutly maintains that man by conscious

effort, especially by collective or state effort, not only does not help this development, but actually hinders it. In this the whole theory is abandoned, for it is plain that if man by conscious effort can hinder a process he can help that process in the same way if he only has enough wisdom and sense. These it is the purpose of science to give him.

In opposition to the theory of natural selection, or unconscious development, has been urged the theory of artificial selection, or conscious development. Ages of natural selection made of the potato a lean, watery, unpalatable tuber; a few years of artificial selection made it a valuable food product and a table delicacy. Compare the development of domestic animals in the last few years, under man's conscious guidance, with their slow and meager development in a state of nature. Man has precisely this power of consciously modifying the natural and artificial elements of his environment, and this power continually enlarges.

So, when we ask if economics deals with natural laws, we really ask whether this being, whose activity in a certain line we are studying, is governed by such laws. If we mean by this to ask whether his action is characterized by absolutely invariable habits, like the forces of physics, we must plainly answer, no. If man had no power of initiative, or, on the other hand, were so perfectly rational as to always do the wisest thing, there would be a regularity in his action which might perhaps form the basis of a complicated, but exact, science. As it is, all social sciences are approximate and partly descriptive. There is much in man's action which is exceedingly (though not perfectly) regular, and hence we have general, though apparently not invariable, laws. There is a part of his action, however, that seems as yet to be capricious, and we can only make note of it till we have more knowledge. The laws of economics are not comparable to the laws of inanimate nature in invariability, but they are of very general applicability, and are wholly in line with the action and intent of nature, and are, in this sense, "natural." But the laws of economics are not natural laws in the

sense in which the word is often used, namely, laws external to man and not at all the product of man. The laws of economics have been designated as social laws to distinguish them from those of physical science. Social laws describe tendencies, or regularities, which appear especially in the consideration of large masses of facts. Human mortality serves as an illustration. When and how a certain man, as A, will die is proverbially uncertain; but when we speak of hundreds of thousands of lives we can predict with such an approximation of accuracy that a vast business-like life insurance can be built upon the regularity of the action of death. The importance of this question will appear later in considering the history of the development of economics.

The foregoing discussion enables us to answer in a word the much-mooted question, "Is economics a science?" It is not an exact or mathematical science, though certain portions of the subject may possibly become so. It is an approximate and partially descriptive science, like all sciences dealing with man, or even with life. The inexactness of the social sciences is due to the very thing which gives them their supreme value, the nature of man and the greatness of their subject.

SUMMARY.

The study of economic history emphasizes the following facts as the basis of economic science:

1. Man must be regarded primarily as a consumer if his true dignity is to be maintained.
2. The recognition of a social class existing simply for the sake of production has tended to a wrong organization of society and a wrong conception of economic science.
3. Economic progress has been a progress toward interdependence, toward social as contrasted with isolated activity.
4. The conditions of economic life are constantly changing, and conclusions based upon them are only relative.
5. Economics may be studied as a static or a dynamic science, each having its value, but needing to be clearly distinguished from the other.
6. The laws with which economics deals are not invariable, like those of physics and chemistry, because of the interplay of the human will, which has the power of independent initiative.
7. Economics is therefore a science, but not an exact science.
8. Man's power of consciously modifying his environment is the basis of artificial as opposed to natural selection.

QUESTIONS.

1. What is the necessity of making man rather than goods the prominent thing in economic science?
2. What ultimately determines whether a man is poor or not? What kinds of poverty are there?
3. What is meant by "dear labor?" Is it a good or a bad thing for society in general, and why? for employers in general, and why? for an individual employer, and why?
4. How far is independence a good thing? dependence? Are the two compatible?
5. What is a static science? a dynamic science? What is the advantage of each? What mistake are we apt to make in considering a science statically?
6. What is the difference between natural and civil law? How do the laws of inanimate nature differ from those governing life?
7. What is the difference between an exact and a descriptive science?
8. What is meant by natural selection? by artificial selection? Which applies to human society? Why?

LITERATURE.

- Sidgwick, Henry: *The Scope and Method of Economic Science.*
 Keynes, J. N.: *The Scope and Method of Political Economy.*
 Ingram, J. K.: *A History of Political Economy.* Chapter VII.

CHAPTER XL

DEFINITION OF ECONOMICS AND ITS RELATION TO THE OTHER SOCIAL SCIENCES.

WE have necessarily anticipated, little by little, most of the elements needed to define economics, but we need to collect and formulate them as exactly as possible. Especially do we need to see clearly the relation between economics and its sister sciences.

Man has been busy from the first in several lines of effort. He has talked, worshiped, fought, studied, etc., and each of these lines of effort has developed its own faculties and institutions. For convenience we may arrange these in eight groups, as follows: language, art, education, religion, family life, society life, political life, economic life. Each of these is the subject of a science more or less developed. The group of society life—that is, the life of polite society, calls, parties, balls, etc., has been studied but little, and we know few of its governing principles.* Language, on the other hand, is a science which has attained to very complete development. The rest lie scattered between these extremes.

A peculiar feature of these activities is that they are all of them *collective* activities, activities which one man cannot well carry on alone. This is obviously true of family and political life, language, and others, and on careful examination it proves to be true of the rest. It is now admitted, after many experiments, that art and even religion do not thrive in solitude. It would seem that if a man could do

* An attempt to examine scientifically some, at least, of the phenomena of polite society has been made by a learned jurist, the late Professor Rudolph von Ihering, in his *Zweck im Recht*, a work which should receive more attention from American and English scholars than they have heretofore accorded it.

anything by himself it would be to get a living; but our brief study of history impresses us with the insignificance of all such effort and the inevitable tendency of men to drift together in their economic activity. If it were possible for men to live in isolation we may safely assert that in such isolation every one of the eight lines of effort we have mentioned would soon dwindle into insignificance or altogether cease. So these sciences are all of them social sciences; and as the sciences that deal with life are now grouped together under the name biology (science of life), so the social sciences are now grouped under the title of sociology, or the science of society. It must be remembered, then, that sociology is a comprehensive science, or rather a group of sciences.

Economics is a branch of sociology. Next to language it is the best developed of them all, and is by far the best introduction to the larger group. Sociology as a coördinating science is in a most undeveloped condition, and must remain so till much painstaking work is done in each of its branches. Economics may be defined as *the science of those social phenomena to which the wealth-getting and wealth-using activity of man gives rise*. This wealth-getting activity is called economic. We may speak of it in all its relations as economic life, or economy. We may thus say that economics is the science which deals with the economic life, or the economy of man. A useful distinction in language is thus made between economy, the life itself, and economics, the science dealing with that life. If this distinction could always be observed much confusion would be avoided.

We have economies of various sorts: the economy of an individual, of a family, a tribe, a city, a state, or a nation, and we have, correspondingly, many economic units. The dominant unit in ancient Greece, for example, was the household, which included the family and all the slaves and other dependents. These lived together and formed a little group by themselves. The economic life of Greece meant, largely, a sum of the economic activities of these households, each of

which strove to be sufficient unto itself. It is interesting to know that many a well-managed Southern plantation before the late civil war endeavored to produce all the means of life on the plantation, and in this respect, as in others, resembled a Greek household. But as time has progressed these old groups have been partially dissolved, and in many instances in modern times the individual, in his economic activity, constitutes a unit, although the family is still the prevalent economic unit. It is a natural outcome of industrial progress, as already explained, that the relations between these units have multiplied indefinitely in number and in importance. This is simply another way of describing the growing interdependence of men. Economics deals especially with the mutual relations of economies of all kinds, private and public. It is chiefly, if not exclusively, a science of human relations, and without these relations could not exist.

We are already prepared for the discovery that these different activities of which we have spoken cannot be wholly separated from one another either in theory or in practice. We have noticed the bearing of legislation on economic life; but legislation belongs primarily to the science of politics, not to economics. If we had studied the history of Russia we should have found that the number of saints' days is so great as to hinder industry seriously; but these belong primarily to the subject of religion. The dependence of economic life upon such institutions as the family, education, etc., is too apparent to need illustration. Hence our definition must be somewhat broadened, as follows: *Economics is the science (1) which treats of those social phenomena due to the wealth-getting and wealth-using activity of man, and (2) which deals with all other branches of his life in so far as they affect his social activity in this respect.* Of course the other social sciences require a similar extension, and so they all are dependent upon economics.

The Principal Divisions of Economics.—Economics in this work will be presented under two main heads, Private and Public.

1. *Private Economics* treats of the economic life of individuals and private combinations. It is not to be understood that this economic life is isolated, for such scarcely exists. The individual, whether single or in association, is still considered in his relations to society. The distinguishing characteristic of this economy is that it is under the control of private persons subject only to such general regulations as the government may prescribe for the protection of the general interests of society.

2. *Public Economics*. This branch of economics corresponds to some extent, but not wholly, to the economic politics or practical economics of the Germans. It treats of the economic life of man as manifested in the activity of the State.* In this we have to do both with the intervention of the State in private industries and with that economic activity which is carried on exclusively under its direction. Such are taxation in its various forms, the management of State property, the appropriation of State revenues, and the management of monopolies owned by the municipality or the State. This branch of economics naturally increases in importance as the functions of the State are enlarged, and it is now attracting great attention.†

Private economics is again divided into four departments, *production, distribution, transfer of goods, and consumption*. Production is the creation of utilities; distribution is the dividing of the product thus created among the different factors of production; that is, among those different persons

*It will be observed that "State" is used here in the generic sense corresponding to the original meaning of "political." It includes the activity of local political units, the commonwealth, and the nation.

† On some accounts it would be better to entitle the two main divisions *Social Economics* and *Political Economics*, in which case "political" would be used in its true meaning, referring to the State. Social economics in the broadest sense would, however, naturally include political economics, for society is larger than government, and includes all its activity within itself. It would, therefore, not be an absolutely correct arrangement, if reference is had to the strict meaning of the terms. It is, however, frequently necessary to restrict technical terms more or less arbitrarily.

or elements which have combined to produce it; transfer of goods is explained by the words, meaning their transfer from one person to another, usually in form of exchange; consumption is the use made of goods, not always a using up, but the process in which goods serve their final purpose and for which they exist.

7

SUMMARY.

1. The different groups of men's social activities correspond to as many social sciences which collectively constitute sociology or the science of society.
2. Economics is the branch of sociology which treats of those social phenomena to which the wealth-getting and wealth-using activity of men gives rise.
3. Economics deals with all other social activities in so far as they affect economic activity.
4. Private economics treats of the economic life of individuals and private combinations.
5. Public economics treats of the economic life of the State, not only in its independent activities but in its connection with individual enterprise.
6. Private economics is divided into production, distribution, transfer of goods, and consumption.

QUESTIONS.

1. Into what groups have men's social activities been divided? Why?
2. What is the group with which economics deals? Does it have anything to do with the other groups? How much? Why?
3. What have these groups in common? What is the relation of economics to sociology?

LITERATURE.

Giddings, F. H.: *The Sociological Character of Political Economy*. (Publications of American Economic Association. Vol. III, p. 29.)

Roscher, W.: *Political Economy*. (Lalor's Translation.) Introduction, Chapter II.

BOOK II.

PRIVATE ECONOMICS.

PART I

PRODUCTION.

CHAPTER I.

INTRODUCTORY.

WE have defined private economics as that portion of the science which deals with private enterprise; that is, with the economic activities of individuals left to themselves. Of course no individual in a civilized country is left to himself entirely. Society, through the organization of government and otherwise, always controls the individual to some extent, but in the great majority of cases he is left to his own devices except for certain general rules. What these rules should be we shall consider under public economics, as well as certain cases in which private enterprise has to be altogether dispensed with. What we have now to consider is not the case of enterprises which are wholly private, for there are none such, but rather *the private side* of economic activities. The line is not easy to draw, but it is very important to consider the relation between these two functions. This is the most important economic question of our day.

Utilities.—Man creates no new matter. Neither the farmer nor the merchant adds one atom to the existing material of the earth. Yet they are both properly called producers. What do they produce? Simply quantities of utility. And how do they produce quantities of utilities? Simply by putting things in their proper places. Man can only move things, and when he moves them in a suitable manner he creates utilities. "This one operation," says John Stuart Mill, "of putting things into fit places for being acted upon by

their own internal forces and by those residing in other natural objects is all that man does or can do with matter." *

It has seemed to some that the farmer is more truly a producer than the manufacturer, and the manufacturer than the merchant; but such is not at all the case. All of these industrial classes do the same thing. They produce utilities by putting things into the right places. The farmer adds nothing to the material of the globe, but he gives direction to the forces of nature so that existing material becomes better adapted to the wants of man, and thereby more useful. He drops corn into the earth, and thereby puts it into a fit place for being acted upon by external natural forces. From time to time he removes weeds and throws earth about the stalk which grows up, and portions of earth, air, and moisture take new relative positions, and the result is again corn, and more corn. Changed places and natural forces have rendered things more useful. All this while man has done nothing but put things in fit places.

The manufacturer changes forms and combinations of raw material by putting things into fit places, and likewise produces utilities. The merchant similarly takes things from places where they are less useful to places where they are more useful. He produces utilities as truly as the farmer or manufacturer. It may well happen that the utilities produced by the merchant could be produced with a smaller expenditure of economic force, and that by a better organization of the factors of production saving could be secured; or it may be that at times the merchant has been able to secure a larger return for the production of a given quantity of social utility than the farmer; but all this is no justification whatever for the popular impression that he is less productive than any other person who is engaged in economic work.

Production, then, means the creation of utilities by the application of man's mental and physical powers to the physical universe, which furnishes materials and forces. This application of man's powers is called labor.

* *Political Economy*, book i, chap. i, § 2.

Those quantities of utility which result from labor are called economic goods; but not all economic goods are the result of labor. Economic goods have not been defined thus far, but they have been described as material good things. Probably any reader of this book would call a vacant lot on Fifth Avenue in New York city a material good thing, even if no person has ever expended a day's labor on it. It is desirable at this point to have a clear idea of economic goods, and a definition is offered. We will begin with the word "good." Everything which satisfies a human want we call a good; and here, on the threshold of our science, we see how absurd it is to say that economic laws are independent of man and would be what they are if man did not live on the earth. We cannot get half way through our definition of economic goods before we have brought in the human element.

Goods we divide into free goods and economic goods. Free goods are those which exist in superabundance and are offered freely to every one without charge. Air and water are usually free goods. Land in a new country is frequently a free good.

Economic goods are those goods which are usually and regularly obtained by man only by exertion, and which, or the use of which, may be disposed of for other goods. They may be further characterized as directly or indirectly exchangeable for all goods which come on the market. After money comes into use they may be defined as goods which exchange for money or as goods which are bought and sold.

A few points require further explanation. "Usually" they are obtained by exertion. One may pick up a diamond or a nugget of gold upon which one has stumbled. Mere picking up of these articles cannot properly be called labor.

Man's Original and Acquired Powers.—The goods or their use may be disposed of for other goods. This enables us to include in our definition both material and immaterial goods, like a person's technical skill acquired by labor, and often very productive. The central point of our science is

the conception of man in his relations to material good things; but it does not seem practicable to exclude utilities fixed and embodied in human beings from the rank of economic goods because man cannot be bought and sold. Once men could be bought and sold, and they then took their place with horses and oxen among material goods. Now man may sell the use of his powers. It is hard to draw the line, but it may be done with sufficient accuracy by keeping in mind our central conception. We would not speak of the cultivation of our faculties, merely for the sake of our own better development, as economic exertion in any strict sense, although it might well have economic consequences. The economic life and its goods are subservient to man. We call the acquisition of a technical skill an economic process, because it has reference to the creation of utilities incorporated in material good things. The direct labor expended on matter we may call a primary economic process, and that labor which prepares us to expend our augmented power on material things to render them useful, or more useful, we may call a secondary economic process. There is a production where economic exertions and non-economic exertions meet, as in the common school education of the young. There are such border lines, where discrimination is difficult or impossible, in natural sciences as well as in social and mental sciences, but they need not, as a rule, occasion much difficulty.

Wealth.—Political economists have usually called economic goods wealth. This term is not wholly satisfactory, on account of the many uses to which the word has been put. It commonly means abundance of economic goods, either absolutely, in proportion to one's wants, or, as is more frequently the case, relatively, with reference to the possessions of others. Wealth is also used often to denote the economic goods belonging to an organized society of men, especially of a nation. We compare the wealth of England with the wealth of France or Germany. We would hardly say Germany is not a wealthy country, but, rather, not a rich country. Notwithstanding the ambiguity, wealth has so gener-

ally been used for economic goods, and is so convenient a term, so much more so than the larger term of two words, that it may not be possible, perhaps not even desirable, to displace it entirely. The two terms can be used interchangeably in many cases, care being taken to employ economic goods wherever it will make our meaning clearer or help to avoid misunderstanding.

The Individual and Society.—One distinction runs all the way through political economy, and that is the distinction between the social and the individual standpoint. We have consequently to distinguish between social and individual wealth, for what is wealth to the individual is often not wealth to society.

Many illustrations offer themselves. A mortgage is individual wealth. If the claim it stands for is extinguished society is neither richer nor poorer. Similarly all State, municipal, and federal bonds represent claims on the industry of the people. If all these bonds should be destroyed the bondholders as individuals would suffer loss, but society as a whole would be neither richer nor poorer, and society, exclusive of bondholders, would have gained at their expense.

Census Estimates of Wealth.—Census returns of wealth, from their very nature, give little idea of the economic well-being of the country. First, census returns are made in money. Now, it is a well-known fact that prices vary greatly according to the amount of money in circulation. If the amount of currency is increased, prices rise, and the returns show an increase in valuation when perhaps there is no real increase of commodities. Plainly such an increase of wealth on paper means no real advantage to the country. Second, an article may be so increased in amount that its value may be reduced in even greater amount. Thus a very abundant wheat crop may reduce the price so low that the whole crop sells for less than a poor crop. The cotton crop of 1869, for example, amounted to 1,129,811,645 pounds, with a farm value of \$303,600,000, or a little over

26 cents per pound. Two years later the crop had increased to 2,020,693,736 pounds, but the total farm value was only \$288,300,000, or a little over 14 cents per pound. Thus while the amount of the crop had increased 890,000,000 pounds, or nearly 79 per cent, the total farm value had decreased over \$15,000,000.* Third, the value of things is greatly affected by the arbitrary disposition of society. When law gives valuable privileges to a company there is an immense increase of value in that company's plant but no increase in social well-being; perhaps even a positive decrease, for property is often rendered less serviceable by such a disposition. When we congratulate ourselves on having more wealth than a country like Prussia we must remember that there the immense property of telegraph and railway lines represents cost, while with us it represents several times the cost on account of the peculiar privileges we have granted to such enterprises. Economic well-being, on the other hand, depends upon the abundance of economic goods, their adaptation to the satisfaction of wants, and on the importance of the wants which they satisfy. Increase in valuation may mean nothing but increased abuse in the management of the nation's goods.

Take our own post office. It can figure in census returns only for the actual value of its plant, while if it should be made over to a private corporation it would soon have a capitalization of hundreds of millions of dollars. Apparently the wealth of the country would be increased, but really we would be poorer, for we should be obliged to support many highly paid officials and costly attorneys, and an expensive and demoralizing lobby to shape post office legislation for private ends.

Most countries have granted limited charters to gas companies, street-car corporations, steam railway companies, and the like. Very often, at the expiration of a given period, as thirty, fifty, or ninety years, the entire property, without rec-

*Statistical Abstract of the United States, Eleventh Number (1888), page 136.

ompense, passes over to the people and becomes public, like our post office. This is the case with street cars in Glasgow, Scotland, and Berlin, Germany, and steam railways in France and Austria. Elsewhere the right is reserved to purchase property at the expiration of a prescribed period, paying for the plant only at an appraised valuation, giving nothing for the franchise. This prevents an inflation of values, but enriches a country.

The results of the household work of women do not appear in the census returns, and yet they include a large part of the utilities created every year in a country. If bread should universally come to be baked outside the home it would increase the wealth of the country as reported in the census returns.

Various Kinds of Production.—We have isolated production and social production, domestic production and production of economic goods for exchanges. Isolated production is found only in the earliest stages of human development, and even then it is not isolated in the strictest sense of the term. Even the beasts of the field are not altogether isolated in their efforts to obtain food, although they differ considerably among themselves in this respect. While we do not find individuals living a strictly isolated economic life we do discover families or households organized as isolated economic units. We find in history, and we discover in the records of travelers, a relatively isolated economic activity. Products are gathered from nature, and these are used to satisfy the wants of the various members of this economic unit. But as time goes on, the greater part of what is produced in industrial centers is destined for the consumption of others, and the production of to-day is chiefly social. Men produce for one another. Domestic production, production in and for the household, is distinguished from production for exchange even in present industrial civilization.

We have also individual and social production in a sense just described in this chapter. Individual production is sometimes social destruction of economic goods. A proprie-

tor of a lottery may produce things valuable to him and acquire wealth, while his activity is from a social standpoint pestiferous. The same thing may be said of the class of saloon-keepers and of all those unhappy wretches who minister to vice. We have also the familiar terms of production on a large scale and on a small scale, well enough understood.

Overproduction and Underconsumption.—The purpose of production is consumption, and if more is produced more must be consumed. Power to consume is measured by purchasing power, and power of consumption sets a limit to production. There is no such thing as general overproduction, for more economic goods of all kinds have never been produced than men really need to satisfy their legitimate wants. On the contrary, not enough has ever yet been produced for this purpose. Sometimes production does not go forward evenly, and there is an undue amount of labor and capital directed to certain pursuits; but until all men are well clothed, housed, and fed, and furnished with material appliances for their higher life, like books, pictures, musical instruments, church buildings, etc., it will be a manifest absurdity to talk about a general overproduction. When there is almost universal difficulty in disposing of goods produced the real phenomenon is described by underconsumption. Men want these goods; they are willing to give services in exchange for them, but they cannot dispose of their services, and consequently they lack purchasing power. A glut in the market always means underconsumption. This is one of the sad and curious features of the life of the modern socio-economic organism. Its parts do not always fulfill their functions harmoniously; frequently parts are partially incapacitated and the body is in a diseased condition.

Some have supposed that luxury and extravagance are able to remedy gluts in the markets, but this is impossible. On the contrary, they frequently bring about a diseased condition of industrial society which leads to gluts. We shall consider this subject at greater length when we come to consumption.

The Relation of Production to Other Departments of Economics.—Production in its broadest sense includes the greatest part of all the branches of private economics except consumption. We have seen that all man can do is to change the place of things. He puts things together in new relations, and new things result. But the process of exchange, which includes transportation, etc., is plainly only a part of this process. It looks very strange at first to think of a merchant as a manufacturer, but when we remember that he subdivides things which are too bulky for use we see at least a suggestion of the manufacturer's function. On the other hand, does not the man who puts a spoke into a wagon wheel do much the same thing as the one who puts the wagon into the place where it is to finally serve its purpose? To a certain extent also distribution, or the sharing of a good among several persons who have contributed to its production, is an inseparable part of our present system of production, though the connection here is not quite so absolute or quite so apparent. In a primitive condition of society, however, distribution was not separate and distinct from production. What a man produced, that he had as his share of the total wealth produced; it was his income. Public economics also, the part played by the State in economic life, is largely a direct factor in production. The remainder has to do with consumption. We are thus led to conclude that the most essential division of economic activities from one standpoint is that of production and consumption, which are natural correlatives. But the branch processes of transfers and distribution are so important, so peculiar, and have so long received separate treatment, that it is every way more expedient to keep them coördinate with the others.

SUMMARY.

1. Man cannot create matter, but can change its place. When this is done so as to create utilities we call it production.
2. All parts of the process of preparing things for man's use—agriculture, manufacture, transportation, etc., are alike productive.
3. A good is anything which satisfies a want; an economic good is one which may be regularly had for exchange.
4. Men have been excluded from the exchange market, but their labor and, in a way, their skill are still bought and sold, and so are economic goods.
5. Wealth often means, in economics, not an abundance but simply an aggregate of economic goods.
6. Individual wealth is not necessarily wealth to society.
7. Census estimates of wealth are a most imperfect index of well-being, among other things, on account of the fluctuating values of money and of goods.
8. Domestic production does not appear in these estimates.
9. In almost all cases production is a social process.
10. What is usually called overproduction is really underconsumption due to bad distribution.
11. A large part of both distribution and transfer might be treated as a subordinate part of production, but they are coördinated with production and consumption for convenience.

QUESTIONS.

1. What is production? How much does it include?
2. What is a good? What is the difference between a good and a thing? What is an economic good?
3. Why are not men classed as economic goods? Why are horses so classed? Is there any inherent difference between the two from the economic standpoint?
4. What different meanings of wealth? What is the economic meaning?
5. What is the difference between individual and social wealth?
6. Why can we not tell by census reports of wealth whether the country is "well off" or not? Why is domestic production not considered?
7. Define overproduction. Why is it generally misunderstood?
8. What is the relation between production and the other branches of private economics?

LITERATURE.

Any of the standard works on political economy, as J. S. Mill's, F. A. Walker's, or Marshall's, treats of the subjects discussed in this and the following chapters on Production. On the productivity of commerce and the erroneous opinion that agriculture alone is production, see Chapter IV in Ely's *Problems of To-Day*.

CHAPTER II.

THE FACTORS OF PRODUCTION.

THERE are three factors of production, of which two, nature and labor, are primary, and the third, capital, is secondary. We will consider these briefly in the order named.

1. Nature.—We include under nature all natural forces used, as the wind, the movement of water, attraction of gravitation, cohesion, etc. Many of these things furnished by nature are free goods and not economic goods. Nature, economically considered, is generally called simply land, because, of what belongs to external nature, it is with land that we have principally to do in political economy. It must, however, be observed that land has a very broad meaning, and includes what is below the surface of the earth, and water so far as it is appropriated by private parties or public bodies like cities ; also in some respects the entire surface of the earth. This factor is in early stages generally common property, but in later stages of life it has been private property, and a return for its use has been secured by private individuals, or, in cases, by the public when owned by the public and leased to private parties. The return which land in itself, apart from capital or labor, yields is called rent. This is pure rent, or economic rent, which is different from rent as ordinarily understood, for rent in popular usage includes recompense for the other factors of production. Pure rent can best be observed in cities, where it is the annual value of lots on which buildings stand. A large portion of the land of Baltimore, Philadelphia, and London is owned by men who do not own the buildings and other improvements but receive from owners of improvements an annual rent.

Land renders three services to production : First, it gives a "standing place." It is something on which we can rest and move about while conducting productive processes. Mere space in itself is often extremely valuable, as can be seen in the case of city real estate ; and as population is rapidly growing, and as a continually increasing proportion of the population dwells in cities, this service is constantly becoming more important, and the return in rent will probably augment rapidly for a long time to come. Second, land contains the elements needed by plant life, and thus serves agriculture. We call this property of the soil its fertility. Third, land contains natural products below the surface of the soil, like coal, natural gas, petroleum, iron, gold, silver, and other metals. These are the natural treasures of the earth. Man does not create them nor give direction to nature in their formation. It has seemed to some nations unfair that these natural treasures should become the property of individuals, and they have treated them as a common heritage, exacting a rent or royalty for the opportunity to appropriate them. This is perhaps generally the case on the continent of Europe, but English law, with its inclination to the exaggeration of private rights, established the principle that he who owns the surface owns to the center of the earth, and upward to the sky. It is a peculiarity of land that its quantity cannot be increased appreciably, and thus it is spoken of as a natural monopoly. This seems hardly accurate. It is a limited factor, but in the ownership or management of land there is no inevitable tendency to monopoly.

2. Labor.—Labor is the second of the two primary things in production. It is here used in a broad sense, and includes all the capacities of every sort, intellectual as well as physical, in man which have economic significance. We might perhaps, on some accounts, better substitute man for labor as the second factor.

It is service supplied by human beings, and is different from other goods because it is always connected with a personality. Moral and intellectual qualities increase its productiveness.

Temperance, trustworthiness, skill, alertness, quick perception, a comprehensive mental grasp—all these and other good qualities belonging to the soul of man are of chief importance in man. Man's mere physical strength in itself is a poor thing, being surpassed by that of lower animals, as oxen and horses; but man is far more productive, and even as a slave sold for far more than the lower animals. The economic value of intellectual training is generally not sufficiently appreciated. It has been ascertained that, with no noteworthy exceptions, the higher in any part of the United States the *per capita* expenditure for schools the higher is the average of wages, and the larger, consequently, the production of wealth.

Growth of Population.—The supply of labor is increased with the growth of population, and to this there is no limit save the means of subsistence. Fear has been expressed that the growth of population may outrun the means of subsistence. A theory of population has been advanced by the English economist, Malthus, which is called **Malthusianism**. It is simply this: population tends to increase as 2, 4, 8, 16, 32, etc., or in geometrical progression, while the best we can hope is that food supply will increase as 2, 4, 6, 8, 10, etc., or in arithmetical progression; consequently, if there were no check to the natural increase of population men would in a short time starve to death. But there are checks to the growth of population, and these are of two kinds, namely, *positive* and *preventive*. Positive checks are those which keep down population by killing off people, like plagues, pestilence, intemperance, vice, crime, war. Preventive checks are those which keep down population by preventing the birth of an undue number of people, as prudence in contracting marriage or abstinence from marriage. These are checks of a moral character. Men who are conscientious will not marry until they feel that they will probably be able to support a wife and bring up children worthily. As population becomes denser this postpones marriage, and as the age of marriage increases the average number of births will

decrease. Innumerable customs exist all over the world, especially in older countries, postponing the age of marriage, and these tend to prevent an undue growth of population. The only practical conclusion which Malthus drew from his doctrine was this: let no one marry until he has a reasonable prospect that he will be able to support and bring up a family of the average size. He wished to intensify the feeling of parental responsibility.

At the present time nothing more in the way of restraint to population seems necessary in the United States than to keep from our shores the lowest classes of foreigners, and to exercise in contracting marriage that prudence which has long characterized the really best classes of American society. Nevertheless, it must be admitted that by no human possibility can population long continue to increase in the United States as it has done in the past, for in a comparatively short period there would not be standing-room on the surface of the earth for all the people. It is said that our population is now doubling in less than twenty-five years. If it continues to increase at this rate we have a geometrical progression. Let us suppose it is now sixty millions and that it doubles once in twenty-five years. Two hundred and fifty years is a short period in the world's history, but our population at the expiration of that period would exceed sixty thousand millions of people, which is forty times the estimated population of the globe at present.

How momentous a thing a geometrical progression is in such a case has been shown more clearly still. Let us suppose that there are only two people on the face of the earth, and that population doubles only once in fifty years. At the expiration of three thousand years the whole surface of the earth, land, and sea would be covered with people piled one on top of the other eight hundred deep.*

Manifestly the present rapid rate of increase of population cannot continue forever; yet it does not cause great uneasiness. It has been urged by some writers that as man de-

* Marshall's *Economics of Industry*, chap. v.

velops more highly his fecundity will decrease and the growth of population will become slower. Others think that prudential and moral restraints will be ample to prevent an undue increase of population.

The chief cause for anxiety is this: For some reason or another it seems to be more difficult for a large population to live peaceably together under present industrial conditions than for a small one, and there is ground for the anticipation that the growth of population will test the worthiness of our civilization to endure, as other causes have tested older civilizations. We may be sure that if there is a moral governor of the universe modern nations, like ancient nations, will be called upon to show their fitness to survive. Every time the sun rises it looks upon a larger population than ever before in the United States, and consequently upon a more complex industrial civilization. A force mighty, and it almost seems irresistible, is at work day and night, day and night, never ceasing, thrusting upon us more and more serious social problems. These problems can never be solved by the policeman's club or the soldier's bullet, for this quiet on-moving force laughs such repression to scorn. Only righteousness can solve them, for only in righteousness is there power to enable us to adjust ourselves to our new environment.

3. Capital.—Capital is the third factor in production. It is not one of the two first things in political economy, but it is a combination of these two. Land and labor together produce capital, just as oxygen and hydrogen combine and produce water. Capital is neither land nor labor, but, resulting from the two, it is a new thing and has properties of its own. *Capital is every product which is used or held for the purpose of producing or acquiring wealth.*

It is often said that capital is the result of saving, but this is misleading. Saving is merely a negative act and cannot produce any positive result. We must have something to save; that is, we must first produce, and then over and above the necessities of life there must be a surplus; if this is in productive use, or held for production, it is capital. It is

to be noted that a simple surplus is not capital. If a man gathers food and necessities for a year or for a lifetime, and then simply takes advantage of them to spend his time in idleness, it is clear that his accumulation serves no new purpose. It is wealth, but it is not capital. Supposing, further, that he lives on this accumulation and meanwhile makes machines or tools with which to assist the process of production. The accumulation on which he lives is still wealth rather than capital, for it is used primarily to satisfy the man's wants, not to produce machines. It is a great mistake to think of man only as a producing machine, and of the things which he consumes as capital spent for the sake of production. This view forgets that production exists for the sake of man, not man for the sake of production. It is a conception which degrades labor, as any conception does which forgets that the laborer is first of all a man, and that he eats for his own sake as much as a king. The real distinction between capital and other goods is that capital is employed as an instrument to acquire wealth, not to satisfy human wants directly. When goods are used to satisfy human wants directly they are rendering the ultimate service which goods can render, and to speak of them in such cases as employed in production is to forget the most important of all truths, that they are employed for the satisfaction of man.

But, while the distinction between capital, or wealth-getting goods, and consumption goods is an easy one, it will be seen that two different conceptions are still included under the word capital. We may view capital from the standpoint of society or of the individual, and each standpoint gives us its own conception. These we may call social and individual capital.

Social Capital.—The most obvious way of getting wealth is to produce goods. This is the only way that society, as a whole, has of getting wealth. Individuals may grow rich at the expense of others, but this does not enrich society. Thus it is that social capital cannot be anything else than productive. Productive capital includes all goods used, not to

satisfy wants directly, but to aid in the production of other goods. Every device, from the bow and arrow of the savage up to the steam engine of to-day, is of this sort, as well as such goods as wool, cotton, lumber, etc., commonly known as raw material. No one wants these goods for their own sake, but for the sake of what they will produce. It is here that we see the significance of saving. Not that mere savings are capital necessarily, but, by accumulating a surplus of subsistence goods, men are able to produce these devices which aid them in their work. Thus capital is rather the result of a special production than of simple saving.

The assistance of productive capital is necessary to any production of economic goods except the most primitive and limited. It means buildings, tools, machinery, steamships, railways, telegraphs, telephones, manufacturing and commercial establishments. To spend each day in working for those things which will directly satisfy our wants is to live from hand to mouth in the most disastrous poverty. As society advances an increasing part of men's efforts are spent on goods which in themselves have no power to satisfy human wants, but which, in their further working, supply much more than man's direct efforts can furnish.

Individual Capital.—While social capital is necessarily productive, and productive capital necessarily social, the same is not necessarily true of individual capital. Individual capital is means of the acquisition of wealth to the individual, and the individual may acquire wealth by other means than production. Now, by far the greater part of capital owned by individuals is not only acquisitive but productive; such as factories, machines, etc. This we call social capital as well as individual capital. By individual capital we mean goods employed to get goods from other people as well as to produce goods. Food is used to furnish ultimate satisfaction to men, and thus is subsistence or consumption goods from the standpoint of society. We toil to get food, and that is the end of our economic efforts. But the individual may look upon the food of workmen merely as a means for the

acquisition of further wealth. He gains an income from it, and to him it is capital. He speaks of it as such. It is evident that this wealth does not produce any further wealth, and so cannot be classed as social capital. It does serve, however, to enrich individuals, and so constitutes something which from the individual standpoint may be called capital. Thus we may say that any economic good, whatever, is capital to the individual who holds it not for consumption, but for the purpose of gaining wealth by it. Shoes are capital to the shoedealet, but not to the man who wears them. From the social standpoint they are never capital. From the social standpoint the question of capital is one of production ; from the individual standpoint it is primarily one of distribution. It may be unfortunate that capital has to be used to designate goods which do not produce and do not enrich society, but usage is so firmly established here that it is useless to protest.

Representative Goods.—Still another class of goods, if they may be so called, must be distinguished from capital in the social sense, and, indeed, from social wealth, although they may be regarded as capital from the individual standpoint. We refer to what are known as representative goods, which, strictly speaking, are not goods at all but only signs of ownership, partial or complete. Such are notes, mortgages, bonds, stock certificates, etc. Their nature will be clear on a moment's reflection. A mortgage is a conditional title to a piece of property. Its only value is the value of the property behind it. A certificate of stock is a title to an undivided portion of the property controlled by a corporation. A government bond is a title to a certain portion of the nation's income which the government pledges itself to collect and deliver to the bondholder. It is characteristic of this class of "goods" that they are not goods, but that they represent goods, and by this characteristic they are easily distinguished. They are not to be recognized in estimates of social wealth. The individual may speak of his wealth or his capital as consisting of bonds and mortgages, but this is,

strictly speaking, only a figure of speech. It is as incorrect to suppose that these things actually constitute his wealth as to call wealth the figures of his notebook in which he has calculated its amount.

Franchises are no part of social capital, they are simply permission to make use of existing social capital or to create social capital. The capital of society is not diminished when the value of corporate property, like railways, telegraphs, telephones, and the like is reduced to a fair valuation for the actual social capital invested. It may or may not be morally right, it may or may not be legally possible, to equalize in a concrete case social and individual capital; only the particular circumstances surrounding that case can determine. It is now simply desired to bring out clearly the distinction.

Fixed and Circulating Capital.—A common division of capital is into fixed and circulating. Circulating capital is capital which can be used only once, or in one round of operations. Its entire value passes over into the product. Fixed capital, on the other hand, is capital which lasts for a succession of operations, and only a part of the value of which passes over into the product with each use. Coal used in a furnace is an example of circulating capital; the coal cart in which the coal is hauled is fixed capital. Of course the difference is one of degree only.

Capital Saved by Being Consumed.—Capital is as truly consumed as any other form of wealth, and exists only for that purpose. The only difference is that consumption in this case does not result in satisfaction of a human want but in the production of a new good into which passes the value of the capital consumed. The widespread impression that it is better for a man to spend his substance in riotous living than to save it rests in part upon this truth. Wealth plainly does not perform its function when hoarded, and the popular objection to hoarding is certainly justified in part. Wealth is lost for the time being when it is simply hoarded. Only when it is employed can we call it truly saved. But while this is true it by no means follows that all using of wealth

is advantageous to the community. The man who uses his wealth in such a way that a hundred men are induced to work for a week in preparing a feast which goes in a night does not profit the community. That labor does not produce anything which the community can enjoy, only a feast for a prodigal. The fact that he pays them for their work only means that he enables them to get a share of the community's stock of goods, but he does nothing to increase that stock. We see, therefore, that it is the productive use of wealth, its use as capital, which benefits the community. Luxury and poverty have gone hand in hand all through human history.

Increase of Capital.—Capital is a growth, and, as a return is exacted for capital, capital begets capital, as it were. This makes it infinitely easier for a man who has capital to accumulate it than for a man who has no capital. Precisely the same is true of the community or nation. The possession of large wealth in the form of capital means the possession of large productive resources, and so the certainty of large returns in wealth. So intimately is present capital connected with past capital that it has been said that there is not a nail in all England which could not be traced back over eight hundred years to savings made before the Norman Conquest.

SUMMARY.

1. Nature, meaning land and all it contains in its broadest sense, is the first factor in production.
2. Land renders three services: it furnishes standing room, plant life, and mineral treasures.
3. Labor is the second factor in production.
4. The laboring population tends to increase more rapidly than the means of subsistence.
5. This tendency is checked by positive checks which kill off people, and by preventive checks which postpone marriage and prevent births.
6. A restriction upon undesirable emigration is a needed check at present in the United States.
7. The difficulty of harmony in a crowded population is the most serious aspect of the problem.
8. Capital is a third factor in production, derived from land and labor. It consists of products used to increase wealth.
9. Capital is the result of a surplus in production which is saved, and which gives rise to a special production.
10. Social capital consists of wealth used for further production.
11. Individual capital consists of wealth used for further acquisition, either by production or by transfer.
12. Representative goods are simple signs of ownership.
13. Capital that is used up in one using is circulating capital; that which may be used many times is fixed.
14. Capital can be saved only by being consumed; to hoard it is to waste it.

QUESTIONS.

1. What do we mean by nature? How much of nature is a "factor in production?" Define this term.
2. What is meant by land? What does it include? What services does it render?
3. What is rent? What double meaning has the term?
4. What is the third factor? What is its principal characteristic as contrasted with land?
5. What is the Malthusian law? What are positive checks? preventive checks? What check does this country need to apply? Why this?
6. What is capital? Its origin? Is food of laborers capital? If so, why? If not, why not?
7. What is social capital? individual capital? Does either include the other, and if so, which?

8. What are representative goods? Are they wealth? Why?
9. What is the difference between circulating and fixed capital? Why is capital saved by being used up? What is the advantage of owning capital?

LITERATURE.

On capital, see Böhm-Bawerk's *Positive Theory of Capital* (Smart's Translation), Books I and II.

On population, see James Bonar's *Malthus and His Work*, and J. S. Mills's *Political Economy*, Book I, Chapter X; also Herbert Spencer's *Principles of Biology*, Part VI, Chapter XII.

On wasteful expenditure and saving, see Ely's *Problems of To-Day*, Chapter XI.

CHAPTER III.

ORGANIZATION OF THE PRODUCTIVE FACTORS.

Early Simplicity.—The organization of the factors of production, simple at first, becomes on the whole continually more complex with the development of industrial civilization. Differentiation accompanies development. The old household economy is organized in such a manner that the existence of three separate factors in production is scarcely perceived. The same man is owner of land, labor, and capital, and all the products flowing into his hand are distributed by him among those who participate in production according to the manner which he deems proper. When production is carried on by a village community we have collective ownership of the instruments, management by a common authority, and a division of products according to regulations based on custom. The products are not divided into parts corresponding to the factors of production, but the same man receives in every case wages, interest, rent, and profits. It is, in fact, only recently, with a new organization of industry separating these factors and assigning them to different industrial classes, that the factors of production have become commonly recognized as distinct either in production or in the distribution of products. Even to-day this separation is in a large portion of the industrial field not effected, and, consequently, there is not there that antagonism between classes elsewhere observed. The American farmer in our Northern States is usually landowner, capitalist, laborer, and manager, and receives rent, interest, wages, and profits, and in the total product cannot distinguish one from the other.

The Guilds.—The old guild organization of industry and commerce united the factors of production in the same man.

The guild of the Middle Ages embraced apprentice, journeyman, and master, and regulated industry and commerce under governmental supervision. The master managed the business, owned the capital, and worked with his own hands. He received the entire product of the business after supporting the apprentices and paying his journeymen. Apprentices and journeymen were, it is true, workmen, and conflicts about wages arose not infrequently, although for long periods harmony prevailed, particularly during the best days of the guilds. There was a partial separation of labor from other factors, it is true, but not complete, and the man who supplied labor looked forward not without reason to the time when he should become capitalist, employer, and manager. This advance was a regular part of the guild system.

Growth of Complexity.—The present century has witnessed a great change in the organization of the productive factors, especially in commerce, manufactures, and transportation. We have a large class that furnishes labor only, another class that furnishes land and capital, and a third class that organizes and manages the undertaking. A modern railway corporation serves as a good illustration. The stock and bondholders furnish capital on which they receive interest; the stockholders carry on the business through managers, and for this service they hope to receive a surplus above interest, called profits; labor is remunerated by wages and by salaries, wages being the remuneration of subordinates and salaries of officials. Land is supplied by owners of stock and bondholders, a part of their capital being exchanged for land, and consequently we have rent also, although not usually appearing as a separate factor. Yet land may appear as a separate factor when land is leased. No doubt railways in Baltimore and Philadelphia pay ground rents, annual returns for land itself, to those who do not own the improvements. We observe, then, all these various classes, and perceive that the product or revenues of the undertaking are divided into a corresponding number of portions. It can readily be understood how controversy respecting portions allotted to the

different classes can arise. It is said that the business community is always in debt, because it carries on business with more or less borrowed money. The owner of the business enterprise is an organizer and manager, and receives wages of superintendence, a salary which he pays himself; he receives a return for risk, he pays interest and receives interest on any money he has invested, he pays wages and rent.

The Entrepreneur.—The one who manages business for himself was formerly called an undertaker or an adventurer, but the first word has been appropriated by one small class of business men, and the latter has acquired a new meaning, carrying with it the implication of rashness and even of dishonesty. We have consequently been obliged to resort to the French language for a word to designate the person who organizes and directs the productive factors, and we call such a one an *entrepreneur*.

The function of the entrepreneur has become one of the most important in modern economic society. He has been well called a captain of industry, for he commands the industrial forces, and upon him more than any one else rests the responsibility for success or failure. A business which has achieved magnificent success often becomes bankrupt when, owing to death or other cause, an unfortunate change in the entrepreneur is made. The prosperity of an entire town has sometimes been observed to depend upon half a dozen shrewd captains of industry. It may be said, then, that the large reward these often receive is only a legitimate return for splendid social services. Such is the case, provided this reward is gained honestly and without oppression. Sometimes gains are partially legitimate and partially illegitimate. It is this mixture, observed by all in notorious cases, which has probably more than anything else led to indiscriminate attacks on the profits of the captains of industry.

The productivity of industry depends largely upon the harmonious development of all the factors. Sometimes labor is specially needed, sometimes capital, sometimes land; most frequently what is needed above everything else is a better

organization of productive factors. Organization is often defective, and talent for organization and management is unfortunately rare.

Division of Labor.—A characteristic feature of the organization of the factors in the present stage of industrial enterprises is what is commonly called a division of labor, but which might with equal propriety be called a coöperation of labor. Productive processes, especially in manufactures, are divided into minute parts, and one part, or perhaps two or three very small parts, given to each laborer. One man makes one little part of a watch, another a second, and there are so many little parts that it is said that it requires the coöperation of at least three hundred persons to organize properly a watchmaking establishment. There are sixty or seventy distinct branches in the manufacture of a piano, and as many in the manufacture of a boot. But the word coöperation used shows that the men are working together. The parts divided must be united to form one whole. When the phrase division of labor is used, we look at one side of the process; when the word coöperation, at another. Division of labor, machinery, and the use of natural powers, like water, steam, and electricity, are the chief part of the explanation of the marvelous increase in the productivity of the productive factors, one man performing the labor now which formerly required the labor of ten, one hundred, or even a thousand men.

Advantages of Division of Labor.—The advantages of a division of labor have been enumerated as follows: First, a gain of time. A change of operations costs time. Less time also is consumed in learning one's business, as the labor of each is more simple. Second, greater skill is acquired, because each person confines himself to one operation and in that becomes remarkably proficient. Third, labor is used more advantageously. Some parts of an industrial process can be performed by a weak person, others require unusual physical strength; some require extraordinary intelligence, some can be performed by a man of very ordinary

intellectual powers, and so on indefinitely. Each one is so employed that his entire power is utilized, and work is found for all, young and old, weak and strong, stupid and intellectually gifted. Fourth, inventions are more frequent, because the industrial processes are so divided that it is easy to see just where an improvement is possible. Besides this, when a person is exclusively engaged in one simple operation he often reflects on this, understands it thoroughly, and sees how the appliances he uses could be improved. Workmen have made many important inventions. Fifth, capital is better utilized. Each workman uses one set of tools or one part of a set, and keeps that employed all the time. When each workman does many things he has many tools, and some are always idle.

Disadvantages.—The disadvantages of a division of labor should be noticed. It makes it possible to employ women and children, and the proportion of men employed decreases. Child labor and labor of women often displace men, and in American cities one sometimes finds fathers at home keeping house while children and wives are at work in factories. The home is thus demoralized, and the rising generation becomes weak in body and mind and depraved in character.

The dependence of man upon man is increased in the manner previously described, and this is frequently, at least, partially an evil. An international dependence arises which occasionally produces intense suffering. The so-called "cotton famine" in the north of England during the American civil war illustrates this. America grew cotton, England manufactured it, and this seemed to work well until it became impossible for England to secure the cotton supply from our South, and the result was intense suffering of hundreds of thousands of working people in no wise responsible for the distant war.

Workmen are often rendered helpless on occasion of a change of production, having learned to do only one thing, which is now no longer required, and having become too old

to acquire a new skill. Dickens describes evils of this kind in his *Hard Times*.

When labor is rendered simple it loses both its attractiveness and its educational value at the same time. One can love his work when one manufactures a whole watch, bearing the impress of care and skill; but who can love the mere routine of raising a sledge hammer and letting it fall for ten hours a day? M. de Tocqueville, in his *Democracy in America*, attributed the high average intelligence of Americans to the fact that labor, when he wrote, was not so divided with us as elsewhere.

Remedies for the Evils of Minute Division of Labor.—Education, particularly industrial training, labor organizations with their debates and discussions, political life with universal suffrage, and increased leisure, are all means whereby the evils of division of labor may be obviated. When labor becomes soulless, ceasing to minister to fullness of life, increased opportunities for development outside of the industrial field must be offered. Hours of labor must be shortened, but not necessarily equally. A clergyman or professor finds opportunities for the harmonious development of all his faculties in his occupation, and the reasons for a short labor day for factory operatives do not exist in his case.

Increased Productivity.—The tremendous increase of productive power, due to division of labor, has often been estimated more or less accurately. It has been said, for example, that modern inventions and discoveries in the great civilized nations have a productive power for each family of five persons, equivalent to the labor of sixty slaves in classical Athens. Now, the civilization of Athens was based on slavery, and it is estimated that there were twelve slaves to a free Athenian family. If this estimate is correct natural forces do for us five times as much as slavery did for Athens.

SUMMARY.

1. The earlier industrial organization did not distinguish the three factors of production.
2. The guilds organized industry in the Middle Ages in a way to keep at least two of the three factors united.
3. Complexity and separation have rapidly increased in our own century.
4. The entrepreneur or manager has appeared as a new factor in production.
5. Division of labor and its organization in production are characteristic of our day.
6. The result is greater economy and productiveness in the industrial process, but a tendency to degradation and helplessness of the laboring classes.
7. Education and leisure must, if possible, compensate the workman for his loss of inspiration in the field of industry itself.

QUESTIONS.

1. Why was the early organization of industry simpler than ours?
2. What was the guild system? Why was it advantageous for the wage-earner?
3. What is division of labor? How does it affect labor? Why does the workman have less chance to rise than formerly?
4. What is the entrepreneur? his function? his importance?
5. What has brought about the division of labor and the appearance of the entrepreneur?
6. What are the advantages of division of labor? its disadvantages? What can be done by way of remedy or compensation?
7. What is the relative productiveness of the present as compared with the earlier systems of organization? Is this necessarily a gain? Why?

LITERATURE.

On the functions of the entrepreneur, see Francis A. Walker's *Political Economy* (Advanced Course), pages 231, *et seq.*

PART II.

TRANSFERS OF GOODS.

CHAPTER I.

INTRODUCTORY.

TRANSFERS of goods are of two kinds : one-sided transfers and two-sided transfers of goods. Transfers of goods constitute a large part of our economic life. The business of one important industrial class, called merchants, consists in effecting transfers of goods. The operations in which merchants are engaged we call commerce. But commerce requires a multitude of other businesses to assist it, and among them are especially prominent the means of communication and transportation, such as public roads, canals, railways, telegraphs, telephones, and banks. These agents of commerce do not confine their functions to the assistance of merchants, but they aid the entire community in bringing about desired transfers of goods.

Exchange.—The part of political economy dealing with transfers is usually called exchange, because transfers are mostly two-sided, and it is with these two-sided transfers that we are especially, though not exclusively, concerned in the chapters which in the present work are placed under the title "Transfers of Goods." Taxes, the chief kind of one-sided transfers, and bequest and inheritance are treated in Book III, since they all involve the action of the State. Money and banks, however, which are treated in the present part of this book, are agencies for assisting in one-sided transfers as well as two-sided transfers of goods.

So great is the importance of exchange that some writers have made it the subject of the science, and have defined economics as the science of exchange. While this is far from adequate, it is true that many of the conceptions with which the science deals derive their chief importance from exchange. Such conceptions are especially *value* and *price*. These terms, together with certain others which arise outside the field of exchange and stand in contrast with the terms mentioned, we must now examine and define. Too much importance cannot be attached to the thoroughness of this examination and the accuracy of the definition.

Utility.—This is a conception which stands in sharp contrast with value. To understand its meaning in economics we must recall the central fact of our science, a fact which we are apt first to take for granted and afterward to forget. Economics is a science of man. Goods may be of interest to chemistry and physics merely as things, but they have no significance whatever in economics until they come into relation to man. That fact in man which reflects upon things a new character and makes them goods is the fact of *human wants*. Everything starts with this fact of man's nature. In order to live, and still more in order to live well, a man needs certain things. If he is robbed of food, air, water, etc., he will die. If he lacks books, clothing, art, friendship, esteem, etc., he will live less well than if he has these things in abundance. So we say man has wants for air, water, food, clothing, art, esteem, etc. *The power to satisfy a human want is utility.*

But it is apparent at once that the wants we have mentioned are very unlike in character. Air and water, for instance, we seldom think of as things we want at all. We usually have them in abundance and without exertion, so that, though they satisfy wants as vital as any we know, we seldom spend any time thinking about them or our dependence upon them. On the other hand, esteem and friendship are very much desired and give us great satisfaction when we secure them, but we feel that they belong to a different

class. We never think of trying to buy them as we do food and clothing. And this suggests a third class of wants, very heterogeneous in character, but having this in common, that the things which satisfy them are objects of exchange. *These are economic wants. The goods which satisfy these wants are objects of exchange.* This distinction is one of convenience, but it corresponds more nearly to the course of men's thoughts than any other line we can draw. Air and esteem, two goods so different in other respects, both agree in this, that men do not buy or sell them, and so do not consider them economic goods. Food and concerts, differing as they do in the most fundamental particulars, agree in this, that they can be exchanged for any and every kind of economic goods, and so each in its proper sphere is always treated as an economic good. We shall find, if we look around, that some goods cannot easily be put on either side in this classification, goods which cannot be had usually without payment, nor yet altogether for payment. Such goods are simply semi-economic and in no way invalidate our principle of classification. Having reached, therefore, a clear idea of economic wants, it follows without difficulty that *the power of satisfying an economic want constitutes economic utility.*

We need here to guard against a misunderstanding which the word utility sometimes suggests. There is a tendency to confound it with the idea of benefit, and to suppose that articles are useful just in proportion as they are beneficial. But in economics these two ideas have no necessary connection. Utility is the power to satisfy wants, not the power to confer benefits. Cigars are as useful in the economic sense as bread or books, for all three are articles of exchange and satisfy human wants. Economists have as strong opinions as anyone as to the relative benefits to be derived from tobacco and books, but we must not confuse our fundamental ideas of economics by inopportune assertions of moral convictions. Economic wants may be serious, frivolous, or even positively pernicious, but the objects of these wants are all alike *useful* in the economic sense.

Value.—Sharply distinguished from utility is value. The contrast is seen when we compare the value of articles with the service which they render in satisfying wants. For instance, take water, a good which satisfies one of the most important of our wants, and yet where it has any value at all, as in cities, it costs only a few cents per thousand gallons. Bread is the staff of life and of incalculable utility, but ten cents a day will furnish a man all he can eat. Although these are extreme cases it holds true generally that value is far below average utility.

We must again turn to wants before we can understand value. We now notice that in general an economic good is capable of satisfying several wants of different degrees of importance. Thus water, first of all, satisfies thirst. The importance of this utility is altogether incalculable, for without it we should die. Then it serves for bathing, a use which certainly seems essential, but one which is far less urgent than the foregoing. If we had to do without one or the other there is no doubt which we should prefer. Then it serves for washing dishes, clothes, and a multitude of such things; then for sprinkling lawns and streets, then for fountains, artificial ponds, etc. All these uses and many more are economic, because men will and do pay for water to satisfy these wants. Thus water has a multitude of most variable utilities. What then determines its value?

It may be well first to note some of the answers already given to this much-debated question. For one, the socialists, with Ricardo and many of the older economists, say that the labor spent on a thing determines its value. This seems very plausible in the case of water, but when we come to the other goods it gets us into trouble at once. For instance, in a church at Antwerp hangs a picture which was painted two centuries ago by a man who worked with great natural ease and finished it in a few days. Recently three hundred and twenty thousand dollars was offered for the picture and refused. Did the labor give it this value? It is sometimes said that this was very valuable labor. How so? because it

produced a valuable picture? Certainly; but is it not clear then that it was the picture that gave value to the labor, not the labor that gave value to the picture? Stronger cases can be found. Trees that no man ever touched are worth hundreds of dollars. Land is valuable that men never set foot upon. Looking to the other side the evidence is just as strong. Men have worked months and years on pictures that no one will buy, and yet they have cost labor. It is sometimes said that such labor is not economically expended; but why not? Simply because it produces nothing of value. So here again the labor does not determine the value of the pictures, but the pictures determine the value of the labor. We shall find that this is a general rule. Labor never gives value to products, but the value of products determines how much labor men will put into them. When they miscalculate the value of the product, the labor is simply wasted.

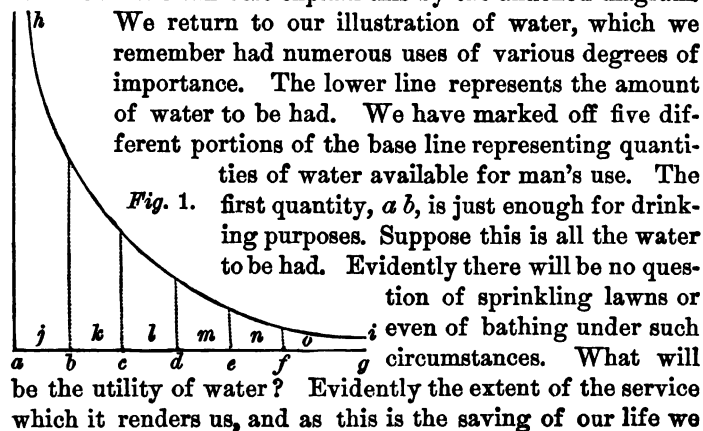
A broader explanation of value is that it is the result of cost of production, including not merely labor but in certain cases capital and rent or use of land. However, this is open to much the same objections as the labor theory. It does not explain how some goods get value far beyond their cost and others fall far below it. Suppose I perfect a machine at a cost of ten thousand dollars which will blow soap-bubbles at the rate of a million an hour? Will it be worth ten thousand dollars? Certainly not, but why not? The theory of costs will not explain it. To say that the labor and materials have not been wisely used is simply to say that the machine has no value, which is just what we are trying to explain. Nor will it do to say that soap-bubbles do no good. They may perchance be as beneficial as cigars, which end in smoke, and yet cigarmakers find their product valuable.

To explain the case of those goods which are valuable far beyond their cost of production reference is made to their scarcity. But scarcity alone does not always produce value. Platinum is far more scarce than gold, but only about half as valuable. And even when scarcity does raise value, why does it?

We have mentioned these attempts to explain value be-

cause they are very common, and this is one of the points of debate just now in economics, and it is important that we should be clear in our conceptions about it. In attempting to explain the origin and variations of value we will for a moment recall the cases we have mentioned and see if we can find a common element. Why will men pay for water? Because they want it. Why did the man offer so much for the picture? Because he wanted it very much. Why will men pay for land and trees which have cost nothing? Because they want them. Why will they not pay for poor pictures or soap-bubble machines which have cost much? Because they do not want them. Thus we are forced back for our explanation here, as always, to man. The fundamental facts in economics come from man rather than from things. If man desires a thing it has value, no matter whether it cost anything or not, and if he does not desire it it has no value, no matter how much it cost.

Thus we find that value, like utility, depends on wants. But we have still to explain why it is that value is low when utility is very great, and that in general the two seem to rise and fall without the slightest reference to each other. Plainly, value and utility are different; but what is the difference? We can best explain this by the annexed diagram.



cannot estimate it. We will indicate it by the area above the line ab , which runs on upward indefinitely as the curved line fails to close in. What will be the value of another portion of water at this point of supply? The whole value of the service the existing supply renders us? Certainly not. Undoubtedly we should like more, and would pay well for it, but as this "more" which we desire is not needed for drinking but for a less important purpose, the value of water now will depend upon this *next unsatisfied want*. Now suppose we have three portions of water, represented by the lines ab , bc , and cd . We now have enough for all our wants down to sprinkling the lawn and the street. We are willing to pay something for more water for this purpose, but how much? As much as when we had only water enough to drink? By no means. The next want on our list is comparatively unimportant, and of course we value an increased supply of water accordingly. With two or three more portions of water all our wants are satisfied, and water will have for us no value whatever. Thus we see that as the amount of water is increased the value falls along the curved line, hi , till finally it touches the base line where the utility of water ceases, and it has no value at all. Its *utility*, as a whole, is greater than ever before, but its *value* is now zero. With only one portion of water, ab , the utility is represented by the area j , and the value of an additional portion by the first dotted line. With two portions the utility is represented by the first two areas, and the value of each portion by the second dotted line. Thus the value decreases as the total utility increases, simply because each new portion adds less utility than the previous one, and the utility of the last portion determines the value of each portion. This is a fact with which we are familiar. A poor crop of low grade wheat may be worth twice as much per bushel, and even more in the aggregate, than a fine crop of good quality.

Our two definitions are, therefore, as follows: *The total utility of a commodity is measured by the intensity of all the wants which it satisfies. The value of a commodity is*

the degree of the want which the existing supply of the commodity has still left unsatisfied. Or, remembering that unsatisfied wants take the form of desires, we may define them thus: *Utility is the capacity to satisfy wants; value is the capacity to excite desire.* The total value of the commodity is equal to the number of units of supply multiplied by the value of the last unit, for according to what has been called the *law of indifference* no more will be given for one unit than for another. We might give our all for one loaf of bread if that were necessary for the support of life and no other could be obtained, but if ten loaves are offered we will give no more for the first than for the last.*

Having defined utility and value, the remaining definitions are easy.

Wealth is an aggregate of economic goods. If we estimate wealth according to values we see that two statements of national wealth would mean opposite things according as goods were abundant and values low, or goods scarce and values high; but the amount in the two cases might be the same.

Economic well-being is an aggregate of utilities; that is, of satisfied wants, not an aggregate of values.

Price is an expression of value in terms of money. When you say you will give three dollars for a hat you mean obviously that you desire the hat as much as you desire the three dollars, or anything else which the three dollars might buy.

* Those familiar with recent economic literature will observe that this statement of the law of value differs somewhat from a formulation which is perhaps more familiar. It is frequently stated that value is equal to the utility of the last satisfied want. It seems to the writer of the present work that we produce regularly for unsatisfied want, and especially is this the case in a dynamic society with increasing production. Of course if we are asked to part with a portion of existing supply which we intended to use to satisfy our wants, the value will depend upon the least important want which that portion could satisfy. Manifestly under ordinary circumstances the two statements are nearly identical. When we consider small increments the last satisfied and the first unsatisfied want differ but little. Value is viewed, then, in this work from the standpoint of the first unsatisfied want.

SUMMARY.

1. Transfers of goods are one-sided or two-sided. The latter are known as exchange, and develop the phenomena of value and price.
2. Utility is the capacity to satisfy wants, and things having this capacity are goods; exchangeable goods are economic goods.
3. Value is the capacity to excite desire, and so depends upon the intensity of the greatest unsatisfied want.
4. Utility varies for the different portions of a good devoted to different purposes, but value is uniform for a given time and place.
5. Economic utility is not synonymous with benefit, but applies equally to unbeneficial or injurious goods if they are desired.
6. Labor and cost do not determine value, but are determined in their amount by value so far as this can be anticipated.
7. Price is value measured in money.
8. Wealth is an aggregate of goods estimated according to their value.

QUESTIONS.

1. Why do useful things often have little value? Why do we not buy and sell air? Is it useful? Is it valuable? Why?
2. Is esteem valuable? Why? Is whisky valuable? Why?
3. What is the difference between value and utility?
4. What is the relation between labor, or cost and value?
5. Are useful things always beneficial? Why?
6. What is price? Do high prices necessarily mean high value?
7. What is wealth? In what two ways may wealth increase?
8. Does an increase of wealth always mean an increase of economic well-being? Why?

LITERATURE.

1. Böhm-Bawerk, E. von: *Positive Theory of Capital*, Book III, is the best existing statement of the theory of value.
2. Smart, W.: *Introduction to the Theory of Value*, an admirable résumé of the subject in brief form.
3. Clark, J. B.: *The Philosophy of Wealth*, especially Chapter V, is suggestive.
4. Marx, K.: *Capital* is the standard presentation of the labor theory of value.
5. Ricardo, D.: *Political Economy*;
6. Mill, J. S.: *Principles of Political Economy*, and
7. Cairnes, J. E.: *Some Leading Principles of Political Economy*, all present the subject from the point of view of the cost of production. Mill and Cairnes are especially good.
8. Jevons, W. S.: *Theory of Political Economy* is suggestive. Articles on the subject of value and allied subjects are found in all the economic journals at frequent intervals during recent years.

CHAPTER II.

THE ORIGIN AND ORGANIZATION OF EXCHANGE.

WE have defined value as the power of a good to excite desire, a capacity which is measured by the greatest unsatisfied want which the good in question is able to satisfy. Thus the value of a good is not something inherent in the good itself, but something attributed to it by human desire. If desires change, values change, even when goods remain the same. Ask a milliner if hats and bonnets carried over from last year are as valuable as ever. By no means, and this purely because women have different wants or desires from last year. The hats and bonnets would be as serviceable as ever if women could only be made to think so, but the stubborn fact that they do not think so destroys both utility (the power to satisfy wants) and value (the power to excite desire) in these articles, and no sensible milliner thinks of arguing against this fundamental fact. Thus we see that *value is a fluctuating fact*. Here again we reach in theory a truth which experience abundantly confirms.

Individual Valuations.—A general rise or fall in values such as we have noticed is by no means the only variable factor in value. Not only do people put different values upon things at different times, but as a matter of course different people put different values upon things at the same time. Illustration is hardly necessary. How much does a woman care for a meerschaum pipe or a man for a Brussels lace handkerchief? The vast majority of goods we care nothing for so far as our own use is concerned. Even among people who want the same things in general there is the utmost variety of opinion as to the relative importance of these things. There is much difference of opinion as to

the value which things ought to bear. In this variety in individual valuation lies the origin of exchange. When two men in primitive life find themselves in possession of things which they mutually desire, but each man desires his neighbor's good more than he does his own, an exchange is natural. Thus each is better satisfied, and the utility of each good is increased by being used by the person who attaches the higher value to it. This brings us to the fundamental fact in exchange, the fact which alone can justify it. *In normal exchange there is a mutual gain.* We are accustomed to think of a merchant's profits as taken from his customers. But do not the customers make a profit too? If not, why do they trade? They want the merchant's goods more than they do their money or anything else their money will buy, and so they derive an advantage. Whether they derive as great an advantage as they might have derived if they had known more about trade is another question. But it remains true that in such exchange there is profit to both parties. It follows naturally from this that where there is no mutual advantage the exchange is abnormal and unjustifiable. All species of gambling come under this head and illustrate the perniciousness of the principle. There is probably no practice known to society which more surely or thoroughly demoralizes men than this species of abnormal transfer which has not for its object an increase of service. We may therefore lay down the general law that *transfers of goods are justifiable only when aggregate utility is thereby increased.*

The Development of Exchange.—We have spoken of exchange as originating in the fact that each of two men possesses a good which he values less than that belonging to the other. We may assume that in the most primitive exchanges this unsatisfactory ownership is the result of accident. Each man does his best to supply his own wants, and thinks little about other people's wants. Only rarely does he find that he can profit by exchange. At first, too, he rarely thinks of exchange. Inside the little family or clan of which he is a member property is held in common, and

there is no question of ownership. Outside this group he is probably too much at war to make exchanges. If another clan has something which he wants he is more likely to think of getting it by plunder than by exchange. Only by a considerable development of society toward peace and stability can exchange secure a foothold and men add to the results of their own labor the occasional advantages of exchange.

But when the habit of exchange is once established a complete transformation takes place in the economic activities of society. Instead of making the things he wants and exchanging an occasional article which he does not want for one that he does, man gradually learns to make what other people want and to depend very largely upon exchange to secure the things he wants for himself. The reason is simple. It is much easier and more profitable to find, raise, or make one kind of good than many kinds. The economic advantage of this process is almost unlimited, and the degree to which it is developed marks the economic progress of society. It is needless to say that the division of labor is dependent upon exchange, and exchange in any highly developed form likewise upon division of labor.

Social or Market Valuations.—We have seen that the values put upon goods by human desires vary from time to time, and that these fluctuations are observable in the market. We have noticed also that the valuations made by the individuals vary enormously, and that these variations are the cause of exchange itself. But the strange fact remains to be accounted for that these immense variations in individual valuation scarcely appear at all in exchange. Whether men want articles much or little they pay about the same price for them. There is a ruling market value, or, as we call it in the language of money, a market price. If a man wants an article ever so much he pays only this price; if he wants it ever so little he pays this same price or goes without it altogether, for it cannot be had for less. How, then, is this leveling of valuations accomplished?

It may occur to us to suggest that these various valuations are averaged to form the market price, but when we stop to think of it there is much in the way of such an explanation. Who knows what these individual valuations are? Who ever tried to average them? How could such an average be enforced? Above all, why is it that the average is so very low in the case of articles on which many place a high value, and which all purchasers value at least as high as the price asked? Plainly the market price is not an average price at all. Indeed, the principle of averages must be applied in economics with great care. It is apt to cover up facts rather than to explain them.

Recurring to our illustration of water, we have seen how men arrange their wants in a series beginning with the greatest and so on down. As water is supplied little by little they satisfy one want after another, and value a new supply of water less and less as their unsatisfied wants diminish in importance. The distance between the curve $h i$ and the base $a g$ in Fig. 1 marks the height of value from point to point as the supply increases, and this we may therefore call the curve of value. But what takes place for society takes place separately for each individual. Each one makes out a personal curve of value for each commodity that he cares for.

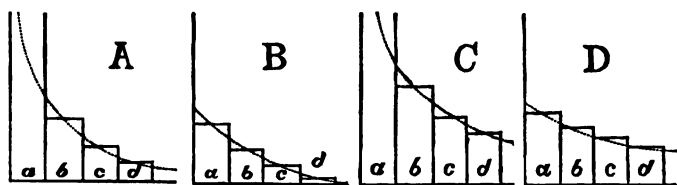


Fig. 2.

Keeping to our illustration, let us suppose four persons, A, B, C, and D, who "want" water about as indicated in these four diagrams in Fig. 2. We will consider in each case four principal wants, though these four wants may stand for different uses in the case of different persons. The greatest want in each case is represented by the rectangle a , the

second by *b*, etc. *A* is a person who represents roughly the average gradation of wants. *B* cares little for water. Even for drinking purposes he will buy wine or beer rather than pay more than a certain low price for water. For other uses he will pay relatively little, and for fountains, etc., he cares nothing at all. *C* is very different from either of them. Having scruples against intoxicating beverages, he finds drinking water indispensable. Believing, too, that cleanliness is next to godliness, he attaches great value to bathing, washing, and street sprinkling. *D* attaches much the same importance to these minor uses, but, like *B*, he is easily persuaded to substitute wine or beer for drinking water if the price of the latter becomes exorbitant. It is evident that personal peculiarities will present curves of value of every

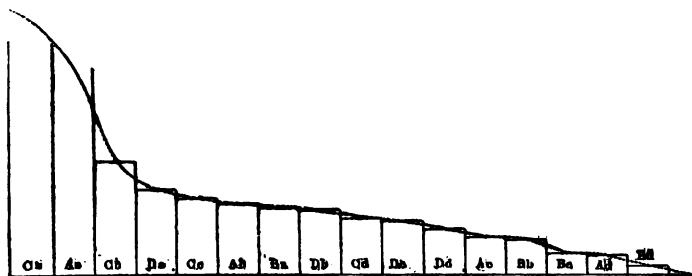


Fig. 3.

possible variety. Now suppose there is water enough furnished by the water works to satisfy three wants for each man or twelve wants in all. It is plain that value, which with an increasing supply always depends upon the intensity of the next unsatisfied want, will be five or six times as great in the case of *C* or *D* as in the case of *B*. Which person's demand will determine the general price? Neither one. The fact is that, when a good is sold by measure and each one takes as much as he pays for, wants are not supplied for all individuals alike. In the present case *C* and *D* will satisfy all four of their wants and *B* only one of his. What happens really amounts to a rearrangement of wants in a

consolidated schedule something like Fig. 3. This gives a new curve of value.* If there is water enough for only three fourths of these wants, inasmuch as the furnishers neither know nor care how much each man uses if he only pays for it, the water will go to the larger wants, no matter whose they are. It is easy to see how much each man will get. The value of an additional supply will be determined by the largest unsatisfied want, which in this case happens to be B's second want. If more water is supplied the value will rapidly fall.

This may all seem rather fanciful, but something very like this is going on all the time. Every shrewd manufacturer is asking questions like these: How much of this commodity do people desire? How strong is their desire for an additional amount? How much will the value be reduced if we increase the supply ten per cent? His whole skill in forecasting the market consists in his ability to estimate correctly the amount and intensity of the unsatisfied wants of society; for it is upon these, as we have said, that value depends at each point of insufficient supply. When no wants remain unsatisfied there is no value, and the good is as "free as air." This social scale of wants, in which are gathered not the wants of four persons but those of millions, is formed naturally enough by the simple pressure of wants in the market. It is different for different commodities, the curve sometimes beginning very high and descending along a scale of rapidly diminishing wants to zero, sometimes varying slowly, each new want supplied being almost as strong as the one before it.

Purchasing Strength.—A difficulty has, doubtless, occurred to the thoughtful reader ere this. If wants determine value and large wants take precedence of small ones, how is it that a rich man may care very little for a thing and yet have it, while a poor man desires it very much and yet has to do without it? The difficulty is due to a change of stand-

* We have a curve because the number of rectangles is indefinitely great, and the gradations infinitesimal.

point as we pass from the individual to society. So long as the individual is comparing his own wants, whether for the different uses of one commodity or for different commodities, his own feeling is the only thing to guide him. He will put the larger satisfaction first, and so on down. But when we have a number of personal scales of wants like those in Fig. 2 we cannot consolidate them as we did in Fig. 3, unless the men have equal power over goods. The reason is that while a man can compare his own wants with each other directly he can assert them against other men's wants only by means of his power over goods. What each man does is to make out a scale of his wants, more or less completely, and then apportion out his spending money according to their relative importance. Of course it makes all the difference in the world how much money a man has, for his *wants make themselves felt in proportion to the purchasing power that is back of them*. If B, in Fig. 2, happened to be a millionaire his lawn might be sprinkled though he personally cared nothing for such things, while D, being a laborer, would not get his sprinkled because his desire, though much stronger, is backed up with so little money. A millionaire's indifference is stronger than a poor man's yearning. Of course, if the four men in Fig. 2 are of different purchasing strength our scale in Fig. 3 would have to be entirely rearranged.

Limit of Supply.—The supply of water in the case we have considered was not sufficient to supply all wants. This is the case with all economic goods, for as soon as they are abundant enough to supply all wants they lose all value, and are no longer economic but free goods. In the case of most goods, however, the supply can be increased by labor. What, then, makes men stop at the point where they do? Why do they not make more of the goods in question and satisfy the remaining wants? This is really a question of production, but we could not consider it until our ideas of value were clear. What determines the point at which men stop supplying a particular good? It is often said that we

stop when value falls to the cost of production. This is in the main true, but how much does it mean? Cost of production is said to be composed of wages, and profits with other factors, all of which, as we shall see when we come to distribution, are determined in turn by very variable human wants. So this answer simply means, when analyzed, that we stop supplying wants when we have to create still greater wants in order to satisfy them. This is true, but it is not a very helpful way of looking at the truth. Without going into the mechanism of the matter, which this is not the place to discuss, let us look at the general working of the collective economic life.

We have seen that various wants for a given good arrange themselves in a scale, as in Fig. 3, and that these are satisfied up to a certain point where value is determined. At this point a day's labor or a unit of other productive energy furnishes a given amount of satisfaction to human wants. But there is an immense number of goods which men are engaged in producing each of which has its own curve of value something like that of Fig. 3. The productive power of society, as we have said, is far from sufficient to satisfy all these wants. How shall it be distributed? Plainly, so as to satisfy the larger wants in each scale. Thus labor is devoted to raising cotton, so that all the stronger wants for cotton are satisfied. Suppose more labor is devoted to raising cotton until finally all wants are supplied. Value will fall lower and lower till with the disappearance of the last want value will disappear also and cotton will become a free good, to be had for the taking. But this plainly is an unwise use of productive energy so long as we have not enough for our purpose; for while we are satisfying trivial wants for cotton important wants for some other commodity, like wheat, would be sacrificed. This would be discovered by the fact that the surplus cotton would excite less desire, and this desire would of course express itself in less and less inducements. Elsewhere desire would speak more loudly, and the distribution of labor would be readjusted. This is just

what happened in the South in 1891. The cotton crop of that year was enormous, but to the disappointment of the producers the value fell very low indeed. This simply meant that the hitherto unsupplied wants for cotton turned out to be feeble. Society on the whole wanted things which the cotton-raisers wanted, and wanted them a good deal more than they wanted cotton. So the cotton-raisers had to give a great deal of cotton to get a small amount of these things, which is what we mean by saying that the price fell very low. They therefore showed that part of the labor spent in raising cotton had been used to satisfy wants which were smaller than many others still remaining unsatisfied, which paid neither them nor society as a whole. As a result they have been trying ever since to turn some of this productive energy into the raising of other things, and the readjustment, though difficult, is sure to come. How plain it is that cost of production did not determine the value of this great cotton crop! There had been no material change in cost of production to produce this fall in value. More wants had been supplied and feebler desires remained; that is all. Value is determined by unsatisfied wants, that is, by limited supply. This limit is itself determined by a balancing of wants against each other with a view to satisfying the larger wants first, no matter what or whose that want is. In bringing about this adjustment the individual seeks in general his own interest, but in the production and transfer under *strictly normal conditions*, which of course nowhere exist, the interest of society is usually the interest of the individual and *vice versa*. In distribution, however, this harmony of interests is at least subject to grave limitations. A distribution of wealth which enables a man to emphasize trivial wants so that they crowd out serious wants, a condition of things which is the law of luxury, perverts this harmony of interests.

Value and Cost of Production.—The difference between the statement of value and its relation to cost of production and that ordinarily given, which makes value

depend upon cost of production, does not invalidate the calculations of the ordinary business man. There is an approximation to equality between the two in the case of goods which can be freely produced ; but the question is, which is cause and which is effect ? It is the value of the product which gives value to all that goes into the product, and men will go on producing so long as the product has a value which will give them as high a return for their expenditures as they could otherwise obtain ; in other words, their action in seeking to use advantageously their economic forces, whatever they may be, will bring about an equilibrium between costs of production and value. Let us take gold and silver as a good illustration. These have a present value with which their average cost of production in the past has next to nothing to do. This value determines what mines it is profitable to work and what it is not ; in other words, establishes a margin of production. All mines on or above the margin will be worked ; all below it will be unworked ; but it is the value which determines the margin, and not the cost of production which determines the value. There is at the same time a coincidence between costs and value at the margin.

General Increase of Productivity—We have seen that it was necessary to call a halt and even beat a retreat in the production of cotton. This, however, was not because the production was really excessive. Men still wanted cotton, and more than was offered. But with its insufficient amount of productivity society could not *then* afford to spend so large a portion of its productive energy on cotton. But if there had been an increase of productivity all along the line in a like proportion this production of cotton would have been entirely proper. Value would fall as before (that is, subjective valuation), but values would fall everywhere in the same proportion and the adjustment would be maintained. Relative values would remain unchanged, which is the essential thing. This is what really happens all the time. The productivity of society is constantly increasing

more rapidly than the population, and so wants which are so small that they once received no attention are now regularly satisfied. If a laborer in the days of Queen Elizabeth had wanted a Bible to the extent of being willing to work two hours for it would his want have been heeded? But now it is satisfied without hesitation.

SUMMARY.

1. Value fluctuates from time to time, and individual valuations also vary widely at any given time.
2. Differences of individual valuation produce exchange, by which each party gains in utility.
3. An increase in aggregate utility is the condition of all normal transfers.
4. The possibility of exchange produces specialized production, under which the producer becomes dependent on exchange.
5. Market or social valuations are reached, not by averaging individual valuations, but by arranging them in the order of importance. The valuation of the last portion supplied will be the market or social value.
6. Wants of different individuals are supplied, however, not in proportion to simple intensity, but in proportion to intensity multiplied by purchasing power.
7. Value is determined for any given article by the amount of productive power devoted to its production, and the limited productivity of society is distributed with a view to equalizing the value which a unit of productive power can produce in each line.
8. General increase of productivity lowers values all around if wants remain the same, and this is a wholly desirable change; but increase in a single line has to be checked, with a view to both individual and social interests.

QUESTIONS.

1. Why are goods less valuable when "out of style?" Are they equally serviceable? Why?
2. What other irregularity is there in values besides that of different times? Does this appear in market values?
3. How do individual valuations combine to give a market valuation?
4. What is the origin of exchange? Why is it profitable? To whom? Why do people not always see this?
5. Why is gambling illegitimate? Mention other cases of transfer which are *economically* unjustifiable?
6. What is the influence of exchange upon production? What are its advantages?
7. Are the wants of all men equally effective in determining market values? Why? What effect does this have upon the total utility which society derives from its goods?
8. Why does value fall when more is produced? What do producers do in such cases? Why?
9. Do values change when production increases all along the line? How? Is it a misfortune? Why?

10. What other condition is necessary in order that the change in values should take place? Is this other condition desirable? Why?

LITERATURE.

See works already cited, and

Patten, S. N.: *Dynamic Economics*, a difficult but valuable study of the relation of changes in production and consumption to prosperity.

CHAPTER III.

MONEY AND ITS VARIETIES.

HAVING discussed at length those fundamental principles on which exchange rests, we now proceed to consider its mechanism. The most important instrument of exchange is money.

There are three different conceptions of money, namely, the popular, the legal, and the economic.

The Popular Conception.—What do people mean in everyday language when they use the word money? This question may be answered in these words: *Money is whatever passes freely from hand to hand as a medium of exchange, and is generally received in final discharge of debts.* It is as a medium of exchange that money first attracts marked attention, and in this it always performs a chief function. Nothing is money, even in the popular sense, which does not perform this function. It is in the general acceptance of money in payment for commodities and services that it performs this function. It goes between other commodities. Wheat exchanges for money, and money for shoes, because money is received in payment both of wheat and shoes. This is the principal function of all kinds of money. Commodities are not usually directly exchanged for one another, but indirectly through the medium of money. The farmer selling his corn for money, and with this money buying sugar, really exchanges corn for sugar, the money serving merely as a convenient medium. It follows naturally from the definition that the credit of the person offering money is not a matter of concern in the transaction, and that his character is not inquired into, unless it is suspected that the money is counterfeit,

that is, not really money at all. What is called money in the popular sense may include more but not fewer characteristics. The definition shows the substance of that which men ordinarily mean when they use the word money.

The Legal Conception is different. Whatever the law declares a legal tender is money in the legal sense. A legal tender is that which the law compels persons to receive in payment of debt.

The Economic Conception.*—But economists have framed still a third definition of money, which we may for lack of a better term call the economic conception. Money in the economic conception must perform all of the following functions: First, it must serve directly and immediately as a measure of value; but value measures value as length measures length. We must take as a unit a definite concrete value like our gold dollar, consisting of 25·8 grains of gold, nine tenths fine—that is, nine tenths pure gold and one tenth alloy. When we say that a commodity is worth nine dollars we mean that its value or quantity of utility is nine times that of our “unit of value-measurement;” consequently money in this sense must be composed of a material in itself valuable. Second, it must serve as a medium of exchange, and it has this in common with money in the popular sense. Third, money in the present sense must serve as a means of making payments, and this is facilitated usually by having a legal tender quality attached to it. It is then likewise money in the legal sense. Payments are often one-sided transfers of goods, and on that account the third function differs somewhat from the second. Fourth, money in the economic sense must serve as a store or receptacle of value. It must store up value so that it can be transferred from place to place and time to time. Roman gold money, preserved for two thousand years, has brought value down to our own time;

* It must not be supposed that this is the only sense in which the term money can be legitimately employed in economic discussions. On the contrary, popular meanings are often the best for economic purposes if they are definite.

and gold money taken across the Atlantic bears with it stored-up value.

These distinctions render it easy to answer otherwise perplexing questions. Are national bank notes money? In the popular sense, undoubtedly, but not in the legal sense nor in the economic sense. Are national treasury notes money? Yes, in the popular and legal sense, but not in the third sense. Gold money in the United States is money in every sense of the word.

Functions of Money.—Money has been called one of man's greatest inventions, ranking with the alphabet. Certainly present civilization would be impossible without it. Its services are so obvious, however, that it is not necessary to dwell upon them. The reader has only "to look and see." Exchange would be awkward and tedious without money, and now that labor is so divided exchanges form a part of our daily life. We enjoy few material good things which have not been exchanged in one way or another many times before they reach us. Without any medium of exchange the man with a horse who wanted a coat instead would be obliged to search for a tailor who desired a horse, and after finding him the exchange would very likely be defeated owing to inequality of values of articles to be exchanged. The coat desired might be only half as valuable as the horse, and the tailor might have nothing else wanted by the owner of the horse. Simple illustrations like this can be continued indefinitely. We can also keep values easily in mind and compare them readily when we have one common measure. Money enables us to travel, carrying stored-up value with us, and assists in the accumulation of capital by providing, as it were, a receptacle for it. If we raise more potatoes than we need we can keep them only a short time, but we can exchange them for money, which can be kept. Thus we save our surplus. Money is a form of capital which has been called free. It can by exchange be turned hither or thither, being ready for the best use which may offer.

Qualities Desirable in Money.—Many things have

been used as money during the world's history. Among them the following may be mentioned: Cattle nearly every where; furs, especially in northern countries; oil; wampum among the early New Englanders; tea at Russian fairs; tobacco, as in Maryland and Virginia; iron; copper; all the baser metals and the two precious metals, gold and silver. All civilized nations have finally found gold and silver best adapted among all the metals for money, and they are so used to-day in every part of the globe. The following are reasons why gold and silver are especially suitable for money metals: They are universally desired, and every one is willing to accept them. They can be used not only in the arts but for ornaments, and this helps to give them stability of value; for if their value begins to fall the demand for them for other purposes than money tends to increase, and this prevents so great a fall in their value as would otherwise take place. Gold and silver are desirable on account of the vast quantities already in existence. The gold in coin and bars, and silver in coin, are now estimated to be worth some six thousand millions of dollars, and compared with this the yearly production is small, its commercial value ranging at present from about two hundred and forty to two hundred and seventy millions of dollars. The production of one mine in one year, even if extraordinarily large, produces a comparatively small effect, being like a glass of water thrown in a pond. It must diffuse itself over a vast surface.

Their high specific value—that is, high value in proportion to weight—adapts them to use for money, because easily transportable. Their value at different places widely separated is more nearly equal than it could otherwise be. Durability and indestructibility are valuable qualities, while extreme divisibility without loss of value makes it possible to measure any desired value, great or small. Malleability renders coinage easy, and homogeneity makes any one ounce or pound just as valuable as any other pound or ounce. They are readily recognizable by their color, their peculiar ring, and by other attributes, and thus they are adapted to popu-

lar use. No other metals seem in like measure to combine so many desirable qualities.

Paper Money has been extensively used. Paper money consists of promises to pay on demand which people are willing to receive in place of metallic money. They are usually promises either of banks or of governments. People take them because they believe the promise will be kept, or because they think that others will accept them, or because they have been made a legal tender and people must accept them for debt, or because, as usually happens, they are receivable for taxes. Where this confidence in paper money is complete it is preferred to precious metals, because more convenient. If any one will read all that is engraved on the paper money circulating in the United States he will perceive its nature, and he will discover that it is of two kinds: notes of national banks, and notes or certificates of the federal government. Adam Smith has compared paper money to a road through the air. It saves the use of the precious metals, and capital, otherwise employed as a medium of exchange, can be used for other productive purposes. It is thus, he says, as real a saving as if we could travel through the air and use the ground now occupied by roads for agriculture and other purposes. The "greenbacks" or paper money of the United States now amount to a little over three hundred and forty-six millions of dollars. They perform the function of gold and silver even better than gold and silver—in foreign ports, like Hamburg, often selling for a premium—and this saves the country this amount of capital. To withdraw them from circulation would be simply a waste.*

"Inflation."—Certain dangers connected with paper money issued by government must not be overlooked. It is easy to set the printing-presses at work and to issue an

*The writer has paid a premium for French paper money in Geneva, Switzerland, where he could have obtained gold money for par, and he has found American paper money selling for more than gold in Stockholm, Sweden.

illimitable amount of money. This is much easier than taxation, and has often promoted waste and extravagance. Besides, only a limited amount can be kept in circulation at its nominal value, and when this is exceeded it falls below "par," which means that paper money will no longer purchase as much as the same amount of gold and silver money. This produces great inconvenience and suffering, because, according to what is called *Gresham's law*, the inferior money drives the better out of circulation, and prices rise on account of the large supply of money. This diminishes the value of fixed salaries and of all fixed incomes, of interest payments on all debts and of wages, until these rise correspondingly, and this takes a long time. It is an inconvenience in international trade, because foreign countries do not recognize the legal tender quality of paper money and will not receive it for taxes, and because foreigners lose faith in a paper money which is not kept at par with the precious metals.

Is Paper Money Safe?—Some have so keenly appreciated the dangers of paper money that they have entirely opposed its use. This does not seem reasonable. Paper money, like other instruments of a high civilization, should be employed with care; but the damage which the best instruments and appliances may do when unskillfully handled ought not to induce us to renounce the advantages which they offer. Rather we ought to acquire prudence, and this is the course which modern nations are actually pursuing. Several countries are now using paper money, and our own among the number. When Congress decided to leave three hundred and forty-six millions of "greenbacks" in circulation alarm was expressed in many quarters; but experience has proved that apprehension was groundless. It may be said that paper money should always be kept at "par," that is, government should always pay coin for paper on demand. When this is done paper money is said to be redeemable; when it is not, paper money is said to be irredeemable. Irredeemable paper money is bad; redeemable paper money

is good. Attention should then be directed to this consideration: How can paper money always be redeemed? or, how much can be issued with safety? Possibly the amount the people will keep in circulation at par may have some relation to the gross revenues of government, for these are payable in paper money, and consequently in making these payments paper money is as good as gold. The gross revenues of our various governments, federal, State, and local, payable in paper may be three times the amount of our "greenbacks." Perhaps we may say that for a prosperous community the paper money which the people will gladly absorb and prefer to gold and silver is equal to one half of all government revenues payable in this kind of money. Possibly, under certain circumstances, more can be kept in circulation. Only careful experimentation can determine, and an adequate "reserve"—that is, supply of coin for payment of paper on demand—should be maintained. Our experience in the United States is an instructive example of economic experimentation.

"Fiat Money."—A few years ago, however, this country was agitated by a proposal to create a new kind of paper money, a money not based on economic demand of any sort. This money was to be of paper, but not a promise to pay gold or anything else. It was to be an irredeemable paper money, not of the usual kind which is temporarily irredeemable, and was popularly called "fiat money." The paper dollar would bear a legend something like this: "This shall be received to the amount of one dollar in payment of all debts, public and private;" and this legal tender character should be enforced by appropriate legislation. It was argued that, every man being obliged to accept this dollar, everyone would be willing to do so, just as our present promise money is now accepted by people who do not wish the gold or silver which it promises, but who simply want to pass it again. The only thing necessary would be that men should have confidence in the power and willingness of the government to enforce its circulation. When this confidence

existed no exercise of power would be necessary, for every-one would accept it freely.

The proposition to create this fiat money has been unduly ridiculed. There is nothing theoretically absurd about this proposition, provided the supply of the fiat money be limited. The possibility of the circulation of such fiat money is conceded by economists generally. All that is necessary to make people accept money is confidence that it can be passed on, and provided the supply is limited this confidence can be based on the power of government to enforce a legal tender act as well as on its power to redeem a note for dues. But while the opponents of fiat money have often been superficial in their arguments they seem to have reached right conclusions. The dangers which have been mentioned in connection with paper money in general become intensified in the case of irredeemable paper money, because the safeguards of redemption are missing. If the paper is always kept at par there would seem to be nothing gained by the irredeemable characteristic; if it is not kept at par inconveniences at once result and it is difficult to set a limit to the issue. A general desire to rob the creditor class is likely to be awakened.

Fractional Paper Currency.—This means paper money of a smaller denomination than one dollar. During our late civil war and for some time thereafter this was extensively used. Forty-five millions of dollars was borrowed by Hon. B. H. Bristow, Secretary of the Treasury, 1874-76, to purchase silver to take the place of this paper. This withdrawal of fractional paper currency seems to have been the result of an excessive reaction against the abuses of paper money. It was extremely convenient, especially for people making small purchases by mail. It is said that the business of several large firms was seriously injured by the removal of this convenient kind of money. Postal notes, which lack many of the conveniences of fractional paper money, and which are far more expensive, each one costing the purchaser three cents, have been introduced as a substitute.

SUMMARY.

1. Money in the popular sense is that which passes freely from hand to hand as a medium of exchange, and is generally received in final discharge of debts.
2. Money in the legal sense is that which has been declared legal tender.
3. Money in the usual economic sense is anything which serves as a measure of value, a medium of exchange, a legal tender, and a receptacle of value.
4. Money is the necessary condition of extensive exchange.
5. Among many things formerly used as money, gold and silver have been selected on account of their universal value, their use in the arts, their large supply, their equable production, their high specific value, and their suitability for coining.
6. Paper money is a desirable money widely used, and consists of promises to pay. It may be either government or private, and may or may not be legal tender.
7. The great danger of paper money is the liability to inflation and the consequent disturbance of values.
8. A redeemable paper currency secured by deposits and guarded in amount is safe.
9. Paper currency for fractions of a dollar was displaced by silver in this country, apparently without advantage to the public.
10. Irredeemable paper money or a fiat money enforced by governmental authority is theoretically sound in principle, but liable to grave abuse in practice.

QUESTIONS.

1. Define money from the popular standpoint; from the legal standpoint; from the economic standpoint.
2. In what sense are greenbacks money? bank notes? silver certificates?
3. What are the functions of money? How many of these functions are performed by gold coin? by greenbacks? by silver certificates? by bank notes? by checks or drafts?
4. What are the advantages of gold and silver for money purposes? What other things have been used? Why was their use discontinued?
5. What is paper money? What varieties are there?
6. What are the advantages of paper money? its dangers? What is needed to make it safe? How much may be safely employed?
7. Why was our fractional paper currency replaced by silver? What were the gains and the losses of this change?
8. What is the real basis of permanently irredeemable paper money? Is it trustworthy? Why?

LITERATURE.

- Walker, F. A.: *Money, Trade, and Industry.*
Nicholson, J. S.: *Money and Monetary Problems.*
Knox, John Jay: *American Notes.*
Laughlin, J. L.: *History of Bimetallism in the United States.*
Jevons, W. S.: *Money and the Mechanism of Exchange.*
Horton, S. D.: *The Silver Pound.*
Sherwood, S.: *The History and Theory of Money.*

CHAPTER IV.

CHANGES IN THE AMOUNT OF MONEY—BIMETALLISM.

The Amount of Money Needed.—The question has often been asked, How much money does a country need? It has been replied, "It makes no difference. If the supply is abundant prices will be high; if the supply is small prices will be low and the same amount of money will go further. A little money will do the work of money as well as a large supply." It is true that there is a relation between the supply of money and its value, and that large supply means small value and small supply large value, but the conclusion drawn does not follow. When the amount of money is small barter is always extensively used, and this is an inconvenience, obstructing trade and causing loss. Enough money is needed so that it can be used in all ordinary transactions of life, thus enabling us to avoid a too extensive employment of barter. But one of the most common business transactions is the payment of wages. We need enough money so that it will not be too valuable to use for that purpose; in other words, the day's labor of an ordinary laborer should not be inferior to the value of a piece of legal tender coin which can be conveniently carried. We need, then, enough money so that the value of a coin of convenient size shall not exceed a day's wages of an unskilled laborer. But it is desirable that money should be still cheaper, so that wages may be divided into parts. It is not necessary for money to be cheap enough to enable us to make our smallest purchases with full legal tender money, because in addition to full legal tender money all countries have subsidiary coins, like our fractional parts of a dollar, containing less coin in proportion to nominal value than full legal tender, and legal

tender only for a small amount, with us ten dollars, and minor coins like "nickels" and "coppers" legal tender for still less, with us for twenty-five cents. Silver dollars fulfill the conditions laid down, but gold does not. Gold is more convenient for large payments. The two supplement each other.

Fluctuations in the Volume of Money.—The ground just given for the need of a certain amount of money, to be determined by circumstances, is not the only consideration to be kept in mind in determining the amount of money required by a country. After the above requirement has been satisfied it may make comparatively little difference whether we have much or little, but it makes a great deal of difference whether we increase or decrease the amount. It is not the "much or little," but it is the "more or less," that is of vital concern. Few things produce more intense suffering than a decrease in the amount of money, and this is on account of the connection between past, present, and future in our economic life. He who treats every economic question as if every day were a period of time apart by itself has scarcely taken the first step toward the comprehension of economic society. Obligations have been incurred in the past, and these are payable in the present or in the future. Now, to decrease the amount of money raises the value of every debt and adds to the burden of every debtor, public and private. It increases the value of notes, mortgages, railway bonds, and local, State, and federal bonds. It enriches the few at the expense of the many. An increase in the amount of money does not have the reverse effect if it is small, because on account of the growth of wealth, the continually diminishing use of barter, and the extension of trade into countries formerly outside of international commerce, the opening up of new countries in Africa, Australia, and elsewhere which need a supply of money, the value of money tends to augment unless there is a growth in the supply. If the amount remains stationary the creditors are enriched at the expense of the debtors. If the amount of money is arbitrarily increased, so that the

value of all debts may fall, it amounts to virtual robbery of the creditors. When arbitrarily the amount of money is decreased it amounts to virtual robbery of the debtor class.

While it may be dangerous to increase the supply of money arbitrarily, as by the issue of paper, it is a fortunate thing if the amount of money slowly and continually increases without direct government action, as by the discovery of new and more fruitful gold mines. The reason for this is that the business community is always a debtor community, while the idle classes are creditors, and that a slight depreciation in the value of money brought about by natural causes, and which consequently does not destroy confidence on the part of capitalists, gives a "fillip" to business and helps to make it prosperous. It may also be urged that with the progress of improvements in industry prices tend to fall, and that unless money increases in amount those who take no active part in these improvements nevertheless gain the benefit of them.

Silver Question and Bimetallism.—The discussion of the amount of money needed by a country naturally brings us to two topics, called the *silver question* and *bimetallism*. Silver and gold are both used as money, and as government coins them it determines the ratio in which it will do this. A ratio which has been commonly established has been one to fifteen and a half, which means that in full legal tender coins one ounce of gold shall be equal to fifteen and a half ounces of silver. This is the European ratio, but the United States has established the ratio of one to sixteen. The European ratio was maintained for about seventy years during this century, principally by France, but during the latter part of the period by the action of a combination of countries called the Latin Monetary Union, in which Belgium, France, Switzerland, and Italy were most prominent. These countries opened their mints for both gold and silver to everyone, and coined money in the ratio of one to fifteen and a half. Everyone who had gold or silver could have it changed into money. About 1873, however, Germany, having formerly used silver,

determined to replace it with gold, and thus threw an immense amount of silver on the market, while the demand for gold was correspondingly increased. Other countries pursued similar courses, our own country demonetizing silver, that is, stopping the coinage of silver, making it only a subsidiary coin, instead of a full legal tender, as it had been. Like Germany, we introduced what is called gold *monometallism*. Gold alone was henceforth to be converted into coins for anyone who offered it to our mints. This action alarmed the countries of the Latin Union, and they suspended the coinage of silver. To add to the confusion, large discoveries of silver had increased considerably the supply of silver, and the old ratio was destroyed, silver falling in a few years so much in value as measured in gold that it required twenty ounces and more of silver to purchase one ounce of gold. All this naturally increased the value of money, and so the value of all debts, producing great distress in Germany and in all other industrial lands. But the increase in debts was only a part of the mischief. Oriental and South American countries use silver, and trade was easily carried on with those countries so long as gold and silver would readily exchange at an established ratio, but when the ratio began to fluctuate an uncertain and demoralizing element was introduced into trade, which rendered it highly speculative, and entailed loss upon the business world. The merchant in Liverpool who sold goods to a merchant in India agreed to receive a fixed sum of silver money, but in England it was necessary to turn this into gold, and a fall in the value of silver might bankrupt him.

Bimetallism has been proposed as a remedy. This means that at a fixed ratio government must coin all gold and silver which anybody desires to have coined. One country alone cannot introduce bimetallism, because other countries might send to it all their silver and take away its gold, just as Germany evidently contemplated draining France of at least a large portion of her gold. Experience seems to demonstrate that national bimetallism is out of the question, and no scientific economist favors it. Economists have, however,

generally come to favor what is called international bimetalism. International bimetalism means bimetalism based on an international agreement like that which obtained in the case of the Latin Union before 1874. It is urged that all countries should agree to coin gold and silver at the old French ratio of one to fifteen and a half, or some new ratio to be agreed upon. If the principal commercial countries of the world, say France, Germany, England, and the United States, should enter into such an agreement, there is no doubt that the ratio could be maintained. Gold and silver are used principally for money, and owners of gold and silver would be obliged either to have it coined at the government ratio or sell it on the market for use in the arts. The arts absorb only a small proportion of the annual product, to say nothing of the enormous existing supply of gold and silver money in the world. Governments then are in the position of monopolists, and by agreement could maintain a fixed ratio. The advantages of this would be to insure a more adequate supply of gold and silver and to facilitate business transactions between gold-using and silver-using countries.

A powerful creditor class in England, which gains by an appreciation in the value of money, it has been stated, has been powerful enough to keep England from joining in the action proposed by the United States and France for the establishment of international bimetalism, and Germany has refused to coöperate unless England's aid could be secured. Consequently up to the present it has not been possible to establish international bimetalism.

Recent Silver Legislation in the United States.—Full bimetalism now nowhere exists, but the government of the United States has not discarded silver or entirely demonetized it. By the "Bland Bill" of 1878 the secretary of the treasury was required to coin not less than two million dollars' worth of silver, nor more than four million dollars' worth, per month. This bill was in force from February 28, 1878, till August 12, 1890, and under it were coined 378,166,793 silver dollars, or over two and one half millions per month. Two

facts, however, developed during this twelve years of limited silver coinage. First it became clear that Americans could not be persuaded to use silver as freely as the people of Europe do. The long familiarity with paper money had accustomed us to its use and its greater convenience. The second was that in spite of this extensive coinage silver continued to fall in value. The first difficulty was met by the issue of *silver certificates* or promises to pay silver dollars. These circulated among the people while the silver dollars remained in the treasury. Of 380,988,466 dollars coined up to November 1, 1890, only 65,709,664 actually passed into circulation, while \$308,206,177 silver certificates were issued and 7,072,625 were not issued at all. This suggested the uselessness of further coinage of silver dollars.

The depreciation of silver suggested two opposite remedies. Some attributed it to the limitation put upon the coinage, and urged free coinage as a cure. Others thought it dangerous to continue the issue, and urged suspension of silver coinage. After a protracted struggle a compromise bill was passed, known as the Sherman law, by which the secretary of the treasury was authorized to purchase four and a half million ounces of silver per month at market price not exceeding par (one dollar for three hundred seventy one and one fourth grains of pure silver). This was not to be coined but held as bullion, and in payment for it were to be issued legal tender treasury notes. Thus the coinage was stopped, and the treasury notes issued were secured by more silver certificates. Under this law were purchased between August 13, 1890, and November 1, 1892, 120,479,981 ounces of silver, of which practically none has been coined.* The bill seems at present to be the object of strong attack from many sides, as a compromise measure is apt to be. The two factions, favoring expansion on the one hand and restriction on the other, are as little reconciled as ever, and the "silver question" in the United States must be regarded as a decidedly unsettled question.

*4,529,322.6 ounces purchased per month.

SUMMARY.

1. The amount of money is a secondary but not unimportant consideration; scarcity leads to barter and inconvenience prejudicial to wage-earners.

2. Changes in the amount of money are far more dangerous, impairing the value of contracts and injuring debtor or creditor. A slow increase, however, seems desirable.

3. The fixed ratios of silver to gold (16 or 15½ to 1) have been disturbed by fluctuations in production and especially by demonetization of silver.

4. The demonetization of silver begun by Germany and continued by other nations has produced much suffering and demoralization in international trade by limiting the supply of money.

5. Bimetallism by a single nation would mean the substitution for gold of the cheaper silver rather than a restoration of the original ratios, and is therefore impracticable.

6. International bimetallism is feasible, and would maintain the value of silver.

7. The United States has tried limited coinage with only partial success. The silver coin does not circulate, but its place is taken by the more convenient silver certificates.

8. Purchases of silver bullion are now made, and treasury notes issued in payment, no silver being coined. The present policy gives little general satisfaction.

QUESTIONS.

1. Does it make any serious difference how much money is in use? Why?
2. What happens if money is increased in amount? if it is decreased? Is a small change desirable? If so, in which direction? Why?

3. What is the relative value of silver and gold? What causes have changed this value?

4. How can government affect the value of either metal? Why?

5. What do we mean by demonetization? Which metal has been demonetized? Where? When?

6. What has been the result to gold? Why? To silver? Why? To general prices? Why? To the debtor class? Why? To the creditor class? Why?

7. What is monometallism? bimetallism? Which is general? What would happen if one country tried bimetallism?

8. What are the advantages of bimetallism? What is the condition of its success? Why has it not been adopted?

9. What was the "Bland Act?" its result? What occasioned its repeal?

10. Define the "Sherman Law," and give the present status of the silver question in the United States.

LITERATURE.

See works already cited at the close of the previous chapter; also:

Taussig, F. W.: *The Silver Situation in the United States.*

CHAPTER V.

CREDIT AND THE MECHANISM OF CREDIT.

WE have seen the immense development afforded to exchange by the use of money, a development resulting in division and organization of labor and a revolution of the whole economic life. Money, however, is entirely inadequate to explain the magnitude of present commercial transactions. Great as is the advantage of money over barter, money is too clumsy an instrument for modern purposes. While money is by no means dispensed with in our day it is characteristic primarily of the economic stage preceding this, and an ever-increasing amount of business dispenses with its use. The characteristic instrument of exchange in our day is not money but credit, and its development measures the perfection of modern exchange. •

Like all terms which economics borrows from practical life, the word credit has many meanings. One of the commonest is indicated when we say that a man has good credit. We mean that he has the reputation of paying his debts and has the ability to do so. Men are therefore willing to sell him goods and wait for their pay until a future period. Another important meaning of the word refers, not to the character of the man, but to the transaction itself. The transfer of goods without immediate payment in money or other goods, but with the expectation of future payment, is credit. It is this idea which we consider in economics under the name of credit. We therefore define this much-disputed term as follows : *Credit is a transfer of goods for a promised equivalent.* First, the transaction is partly present and partly future. Second, the transaction involves confidence on the part of the lender, based either on the character and resources

of the borrower or on goods pledged by him for the fulfillment of his promise. A third factor usually present is an evidence of indebtedness delivered to the lender. This constitutes the instrument of credit, in its narrower sense.

The Mechanism of Credit consists of two parts : first, the evidences of indebtedness or instruments of credit, such as checks, drafts, notes, bonds, etc. ; and second, the institutions of credit, consisting principally of banks and clearing houses.

The Instruments of Credit.—A *check* is an order given by a private individual or company upon a bank ordering the payment of a certain sum of money to the order of a person named or to the bearer of the check. In this form of credit transaction the element of time is reduced to a minimum. If money were paid the person receiving it would very likely carry it to the bank, and as it is he carries the check instead. The element of credit here prominent is the trust or confidence involved. Until we know that the payer has money in the bank we do not know whether we shall get our pay or not. The time element is so slight that it is usually disregarded. A *draft* is a check issued by a bank upon another bank. A *note* is a written promise to pay. Here the time element is important and is recognized by the payment of interest according to laws which we shall consider later. A *bond* is one form of government note. Recalling what was before said as to paper money, we see that promise money is only a note issued by the government or by a bank which for particular reasons does not bear interest. The ordinary instruments of credit do not circulate freely, like money, but are intended to be used primarily in one transaction. They are by no means confined to this, however, in every case. Notes are very often transferred once, twice, or many times, and checks and drafts often pass through many hands, but always with reference to the character and credit of the persons involved. Their relationship to money does not occasion any practical difficulty. Many things indicate that one is intended for general use and the other

for particular transactions. Money makes no mention of any person to whom payment is to be made, and is issued in denominations having reference not to a particular transaction but to general convenience. Instruments of credit are usually issued in amounts determined by particular transactions; they are issued to particular parties, and are transferable usually only by indorsement.

A note may be given in two ways. A person who buys goods for "value received" promises to pay the person of whom the goods are bought. But the seller may also "draw on" the buyer by means of a bill of exchange, also called a draft. Let us say A is the seller, B the buyer. A then writes out an order to B to pay to himself or a third party, as C, "for value received," the amount of the debt. A, the creditor, signs the bill. If B acknowledges the debt, and is ready to agree to pay it, he writes on the bill when presented "Accept" and signs his name. It then becomes binding, and the merchant who does not pay his drafts when they fall due becomes bankrupt. A check or bill may be transferred by indorsement. The person to whom payment is to be made, the payee, writes his name on the back with an order that the money be paid to a fourth party, D, the indorsee. The payee who indorses the instrument of credit is the indorser. The indorsee may assign the instrument to still another party, as E, by a new indorsement, and he then becomes indorser. This may be continued indefinitely, and thus the instrument may pass from hand to hand in place of money, each one who indorses it becoming responsible provided that no previous indorser can be made to fulfill his obligation. Other terms are readily understood, as payer, the one who must pay; drawer, the one who draws an instrument of credit; drawee, the one on whom it is drawn.

Book credit is extensively used. When goods are transferred a record of it is kept, or, as we ordinarily say, the goods are "charged," and a bill is afterward sent for the amount. A vast amount of credit is granted in this simple, old-fashioned way, both in wholesale and retail trade. Re-

cently large mercantile establishments have tried to abolish book credits, and it may not be too much to say that there has been a general movement toward restricting it and defining its limits more accurately.

Advantages of Credit.—The advantages of credit may be thus summarized : 1. Credit furnishes a more perfect and convenient means of payment in large sums and between distant places than the precious metals, saving time and labor. This is effected by means of notes, checks, and bills of exchange. It is thus that only small sums of money are sent from one country to another in international trade. Only balances are paid in money. If some London merchants owe New York merchants a million pounds and other New York merchants owe these London merchants a million pounds, it is obvious that no money need leave either country. The London merchants will send orders to their New York debtors to pay their New York creditors. This is the simplest kind of *cancellation of indebtedness*. In actual life it is more complex, but the principle is the same. If the London creditors of New York merchants are not the same as the London debtors, the debtors could buy orders of the creditors and send them to New York. If New York merchants owe London merchants, it is possible that Paris merchants may owe New York merchants an equal sum, while London merchants are in debt to Paris merchants to the same amount. By exchange of orders all debts could be paid. This is called *arbitration of exchange*. Naturally a class has arisen which deals in these instruments of credit, and this is the class of bankers and brokers. Debtors and creditors both resort to them. Bankers and brokers are the middlemen between debtors and creditors.

2. Credit takes the place of corresponding amounts of gold and silver. This is a saving, enabling us to employ the precious metals for other useful purposes.

3. Capital is employed more productively. He who possesses capital, but is for any reason unable or unwilling to use it, transfers it to another for compensation, and thus

both are benefited as well as the public economy. Other things being equal, it is given to him who will pay the most for it, and in a normal condition of things this is the one who can employ it most productively.

4. Credit enables those who have business qualifications and no capital, or inadequate capital, to engage in business and to employ their talents for their own benefit and for the benefit of society. Many thus start without capital, and in the end become capitalists themselves. Credit has been the starting-point of many of the large fortunes now existing. Credit brings together in numerous instances capital without business qualifications or inclination for business, and talent without capital, and thus may be said to be not without influence in uniting capital and labor harmoniously. This is particularly the case with those institutions which supply capital to the poorer classes, like the German coöperative credit unions, which furnish artisans, mechanics, and small traders with capital, and with American building associations, which furnish the same classes with capital for the construction of homes.

5. Credit gathers together the smallest sums, particularly by means of savings banks, and these small sums forming a large aggregate are productively employed by joint-stock companies and other concerns. Capital is thus concentrated, but its returns are scattered among the people. Credit encourages capital accumulation and promotes thrift. Credit in this manner gives employment to small accumulations as they are made, and this helps men to provide for emergencies and for old age. Other advantages of credit will suggest themselves to the careful observer.

Evils of Credit.—The dark side of the credit economy must not be overlooked. It continually encourages extravagance, and this is a fruitful source of fraud and embezzlement. Credit promotes precarious speculation, because those who engage in it have little of their own capital to lose, and are over-reckless with the capital of other people. Our entire land is strewn with the ruins of businesses wrecked by

men who have mismanaged the property which unwise credit gave into their hands. As credit sometimes enables the poor man with gifts recognized and favorably situated to become an independent producer, it frequently enables the one already producing on a vast scale to extend his gigantic operations and crush out men who have been independent producers.

It has been said that all "consumptive credit," that is, credit to enable one to spend money for one's personal gratification, or for personal use in any way, is bad, while productive credit, credit for carrying on a business, is good; but the line cannot be so sharply drawn. Consumptive credit frequently leads to extravagance, but it also has enabled many a young man to develop personal powers and to become a great artist or scholar, while, as just seen, productive credit frequently causes loss.

Institutions of Credit.—Bankers have already been described as men who go between borrowers and lenders, or as middlemen in credit transactions. They are sometimes called dealers in credit, and there is little that they do which is not in one way or another connected with credit. But banks are not mere agents. They have a capital of their own which serves the purpose of a guarantee fund, and they receive money which their customers deposit with them, and mingle this with their own, gaining exclusive control over it all. They become the debtors of the depositors and the creditors of those to whom they lend money. Their source of profit is not chiefly their own capital, but the capital deposited with them. Sometimes they pay no interest, and if they pay interest they charge more, the difference constituting their profit.

Formerly banks in the United States nearly all issued notes which circulated as money, and this was regarded as their principal business. Now only national banks are allowed to issue notes, and they must deposit bonds at Washington as security for this circulation in addition to paying a tax for the privilege. All governments in civilized coun-

tries have greatly restricted the power of banks to issue circulating notes to serve as money, and the number of banks that find a source of profit in the production of bank money is constantly diminishing. Perhaps some day all governments will, as has been advocated by many able thinkers, reserve to themselves the exclusive right to issue paper money.

Clearing houses are labor-saving institutions originally contrived by employees of banks. Banks in a city have continual dealings with one another. A customer of a bank deposits with it all his checks, no matter on what bank drawn. It consequently happens that a bank in New York, for example, will receive checks every day on all the other banks, while all the other banks receive checks drawn on it. Formerly there was continual running back and forth. A runner from each bank went to all the other banks. Now the representatives of all the banks meet in one common place, and exchange checks, drafts, etc., and only the differences or balances between the sums due and the sums which a bank owes are paid. If more is owed to a bank than is due from it to the other banks it receives this difference from the clearing house; if it owes more than is due it, it pays the difference. The sums due the clearing house and the sums which it must pay of course balance perfectly, and it is left without any money on hand.

The clearing house statistics illustrate the inadequacy of money to do the business of the world. The total transactions of the clearing houses in the United States for the year ending September 30, 1888, amounted to over fifty thousand millions of dollars, or more than thirty times all the money in the country, bank notes included; for the money in the country at the time was only about sixteen hundred millions of dollars.*

*The manager of the New York Clearing House, Mr. William Scherer, kindly furnishes the latest statistics of that institution, which are as follows:

Exchanges, year ending December 31, 1892.....	\$36,662,469,201	55
Balances.....	1,888,087,262	97
Transactions.....	38,550,556,464	52
Average daily exchanges.....	120,600,227	63
Average daily balances.....	6,210,813	36

SUMMARY.

1. Money has proved inadequate for modern exchange, and credit has displaced it for ordinary large transactions.
2. Credit is a transfer of goods for a promised equivalent.
3. The chief instruments of credit are checks, orders on a bank drawn by a private person; drafts, checks drawn by a bank; promissory notes, bills of exchange, and book credit, or "charging."
4. Credit greatly economizes money transactions and the attendant use and transportation of the precious metals, and aids in the productive employment and wise distribution of capital.
5. Credit often results in speculation and waste as well as in destructive commercial warfare, disastrous both to individual and public welfare.
6. Banks are institutions for facilitating credit transactions.
7. Clearing houses are institutions to facilitate transfers of credit between banks.

QUESTIONS.

1. What different meanings has the word credit? In which sense is it used in economics?
2. Is there always a time advantage in credit? What other advantage is there in credit payment?
3. What is a check? a note? a bill of exchange? a bank draft? What other kind of draft, and how is it used?
4. What is a note? a bond?
5. What is the advantage of a note? of a check?
6. What is book credit? What is the present tendency regarding it? Why?
7. What effect does credit have upon the productiveness of capital, and why? upon the accumulation of capital, and why? Have these two results any connection, and if so, what?
8. What are the evils of credit? Are the evils to society as serious as to individual owners? Why?
9. What is a bank? Enumerate all the functions of a bank. How do they make their money? Is this legitimate, and why?
10. What are the advantages of bank money? its dangers? the present tendency regarding it?
11. What is a clearing house? What are its functions? About what part of the checks and drafts drawn on New York banks are mutually canceled? How are the balances paid?

LITERATURE.

Knox, John Jay: Reports as Comptroller of the Treasury, in *United States Finance Reports* for 1875-76.

Gilbart, J. S. : *History, Principles, and Practice of Banking.*

Dunbar, C. F. : *The Theory and History of Banking.*

Bagehot, Walter : *Lombard Street.*

Morse, J. T. : *Banks and Banking.* (This work presents the legal side of the subject.)

Walker, F. A. : *Money, Trade, and Industry ; and Political Economy.*

Ely, R. T. : "German Coöperative Credit Unions," in the *Atlantic Monthly*, February, 1891.

See the article "Clearing System" in the *English Dictionary of Political Economy*. Edited by R. H. Inglis Palgrave. Also articles in other dictionaries and cyclopedias.

PART III.

DISTRIBUTION.

CHAPTER I.

DEFINITIONS OF DISTRIBUTION AND RENT.

It has already been remarked that the production and the distribution of the annual income of society cannot be sharply separated, and the reader must have observed that more or less has been said about the four parts into which the products of industry are usually divided, namely, wages, interest, profits, and rent. Taxes may, perhaps, be regarded as a fifth part into which the annual income of society is divided, and we may treat taxes as the part which society, organized as the State, receives for its participation in production. But, if this view is taken, we have a fifth part peculiar in so many respects that it is desirable to treat it neither under production nor distribution.

The greater part of distribution might undoubtedly be considered under the general heading "Production," but on the other hand it is frequently asserted that distribution is "the true center of all economic inquiries," and it would be possible to treat nearly the whole of production from the standpoint of distribution. The truth is that these old traditional divisions of our subject-matter indicate different points of view, and on this account it seems desirable to retain them. When we pass from production to distribution we do not enter by any means an entirely new field, but we look at an old field of investigation from a new point of view.

We have to discuss under the name distribution two dif-

ferent processes. The first and inclusive meaning of the term is the distribution of wealth or income of society among individuals and families ; in other words, the question of individual fortunes, poverty and wealth. This distribution is to a large degree the result of conscious effort on men's part to control it. The second kind of distribution is the division of the product among the different factors of production. This is not a question of wealth *versus* poverty, but of wages *versus* interest, profits, rent, etc. Of course this kind of distribution affects the question of private fortunes very considerably, but it is by no means the same question. It is not at all clear that it would not be better to call this kind of distribution by a different name, but here, as in the case of capital, usage is too strong for us, and we must consider two things under one name. There is need of care, therefore, that we know just which idea is meant when the word is used.

There is another sense in which the word is *not* used in economics. We never mean by distribution the moving of goods about over the country from the point where they are manufactured to the place where they are consumed. When we hear of railways or other concerns as "distributive agencies" we are using the word distribution in a sense wholly different from that of the economic term distribution. *Distribution is a question of ownership, not a question of the location of goods.*

This brings us to the question of the institution of private property, and recalls the fact that whatever may be the origin of private property its present existence is due to government. It is not the individual who maintains the institution of private property, or modifies it by conscious effort, but the State. Now, the question of private fortunes depends primarily upon the action of the State regarding private property. This general distribution is therefore a question not of private but of public economics, and its consideration comes in Book III. Our attention in this place will, therefore, be confined to that subsidiary process of

dividing the results of production among the different factors which have combined to produce them. This process, which we may call *product distribution*, is chiefly controlled by unconscious social forces, and the State interferes only in a general way and to a limited extent with the workings of these forces. Such conscious interference as there is is largely the work of private organizations.

Rent.—Rent is that which is paid for the use of land. In spite of sundry attempts to extend the meaning of the word it has remained one of the best defined and least ambiguous terms in economic science. But while economists are nearly agreed in their use of the term the popular meaning of the word is much less exact. That which is paid for the use of a house or building of any sort is commonly called rent. We shall see that this so-called rent really consists of two elements, one a ground rent, or rent proper, the other capital rent, or what we shall call gross interest. If this distinction seems fanciful it is only because we are accustomed to see the two united under one ownership. But in most large cities separate ownership is common. Sometimes one man owns the land and leases it for a long term of years to another who erects buildings upon it, which either with or without payment become the property of the landowner at the expiration of the lease, unless it is renewed, and if it is renewed the one who possesses the house must frequently pay for it. Often, however, the separation in ownership is a permanent one, the houseowner paying perpetually an annual sum for the use of the ground. This is the case in Baltimore, for example, where ground rents are an important feature in the economic life of the city.

In such cases the two kinds of rent are very clearly distinguished. We shall see later that they are really governed by different laws, so that while capital brings a less return as society develops, land brings an increasing return. Let us remember, then, that in economic discussion generally the term rent means only an income from land, and that it is used only in this sense in the following discussion.

The principal difficulty connected with the subject of rent lies in determining the law which governs its amount. As has been already said, the portion of produced goods falling to the share of the different factors of production is determined in the first instance by laws independent of human contrivance. Of course men may and do supplement or interfere with the operation of these laws to any extent. Some of these efforts we shall consider in the present book, others in Book III, but for the present we shall confine ourselves to the fundamental laws already referred to.

The first thing to be noted about land is its *quality*. Differences of fertility are familiar to everyone, and depend upon what has been known as "the natural and indestructible properties of the soil." An effort has been made of late by certain writers to minimize or deny the significance of this factor. It has been said that "soil" is not indestructible, that it may be exhausted or removed from land altogether, and that it may in turn be created by means of fertilization, etc. These writers recognize in land no other indestructible property than standing room. This objection arises from the use of the word soil in a narrow sense. If by "soil" we mean only that thin top layer of the land containing some elements necessary to plant life, it is true that this may be carted on or off at pleasure, that it may be wasted or replenished. But, granting this, there still remain many qualities of land which are indestructible and unproducible, and which so directly affect the productiveness of the land that we may not inappropriately call them "properties of the soil." Such a property is the conformation of the land. A steep gravelly hillside will by no possible effort equal a plain in fertility. The north side of a mountain cannot be made to produce the same as the south side. Climate is, to be sure, not a "property of the soil," but it is an inseparable appurtenance of the land, and upon it the productiveness of the land primarily depends. It is needless to say that the ownership of a piece of land carries with it the advantage of all the conditions which attach to that land. It is simply true, therefore, that the

expression "natural and indestructible properties of the soil" is an inadequate and misleading expression ; not that there is nothing but standing-room to be considered under such a term. We will therefore adopt another expression to explain what we mean by quality in land, namely, the irremovable conditions affecting its productiveness. Of these its extent (standing-room), its conformation, and its climate are essentially natural and indestructible. Others, such as are connected with the "soil" in the narrow sense, are not indestructible nor necessarily natural, but they affect rent none the less. In defining quality as the conditions affecting productiveness of land we have discarded the word "soil" because it has proved itself treacherous; we have omitted the words "natural and indestructible" because fertility may be artificial and is always destructible. On the other hand, fertility, even when artificial, becomes essentially a part of the land. Of course, it is physically removable but not economically so. From the case where capital is embodied in land and entirely assimilated to it in character we pass by insensible gradations to fences, barns, houses, etc., which more and more assume the character of capital as distinguished from land. It would, of course, be possible to restrict the term land to strictly natural land and apply the term capital to all products, including the soils of old land. This would be a logical distinction, but, like so many logical distinctions, it would be confusing. On the other hand, if we include under land all capital that has been incorporated in it we must recognize that there is no absolute line of division between land and capital. Thus we are again reminded that distinctions in economics, as well as in practical life, are questions of convenience, and are good or bad according as they are more or less useful.

The second great fact regarding land is *location*. On one side this is closely connected with climate. Land situated near a body of water or near a mountain range is much affected by these great controllers of climate. But a more distinct meaning of the word is location with regard to the

consumers of products. Everybody knows that land a hundred miles from market is worth more than land a thousand miles from market. The difference is simply one of transportation. This, however, is not simply a question of distance, but also one of accessibility. Land may be far away and yet easy to reach, or near and difficult of access. It will be noted that any change in the cost of transportation affects rent. The rents of England have been revolutionized by cheap ocean transportation, which has practically brought distant land very near to her shores.

To this fact of location we must ascribe almost wholly the enormous rents paid for city lots as contrasted with the insignificant rents paid for lots in the suburbs or in small towns. Here, again, transportation powerfully affects rents. Good means of rapid transit increase the value of suburban lots and check the rise of city rents. It is believed by some that the development of these means of transit will not only stop the advance, but even bring about a reduction in city rents, which have been increasing for a century or more.

Having noticed that land differs greatly in quality and location, we may now reduce these two differences for purposes of convenience to one. Suppose a man in New York city owns two farms, one in Dakota and one in New York. If the farm in Dakota produces thirty bushels of wheat to the acre and it costs ten bushels of this to get it to New York city, while the New York farm raises twenty-two bushels and it costs two bushels of this to get it to market, the farms are equally productive so far as the owner is concerned. If the other conditions of production are the same the land is equally valuable to the owner. To be short, we may say that the two pieces of land are equally *good* land. Whenever we speak of good land, therefore, in connection with the subject of rent, we mean land which for all reasons taken together is desirable.

SUMMARY.

1. "Distribution" may mean the distribution of wealth among individuals, or the distribution of the product among the factors of production. The latter is included under private economics.

2. Rent is that which is paid for the use of land. Capital invested in houses, etc., is not included in land in this sense.

3. Land differs in quality, that is, in fertility, climate, accessibility, etc. Its quality is to be estimated by its *net* productivity or ability to put products into the market. "Good land" means productive land well located.

QUESTIONS.

1. What two meanings has the word distribution in economics? What third meaning not recognized in economics?

2. In which of the economic senses is it used in Book II? Why is the other postponed to Book III?

3. What differences are there in land? What is meant by "good land" in economics?

4. What two meanings are there for the word "rent?" In which sense is it here used? What is included under land?

LITERATURE.

George, Henry: *Progress and Poverty*.

George, Henry: *Social Problems*.

Walker, F. A.: *Land and its Rent*.

Clark, J. B.: *Capital and its Earnings*.

CHAPTER II.

RENT WITH AND WITHOUT FREE LAND.

RENT must be considered in two aspects: first, rent while free land remains; second, rent when all land is taken. The latter is seldom realized, but it is the certain outcome if population continues to increase and private property in land is maintained.

Rent with Free Land.—Under these conditions there is a certain amount of land which may be had for nothing. Of this land some is cultivated which pays no rent; other is not cultivated at all. Why, then, will land bear rent under such circumstances? Obviously, because it is more desirable than the land which may be had for nothing. How much rent will it bear? Just as much as it is more desirable.

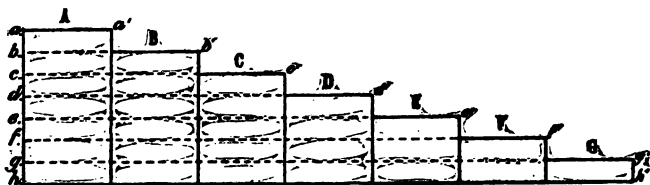


Fig. 4.

Suppose Fig. 4 to represent the land of a country (foreign land being excluded from competition for the sake of our illustration) arranged in seven groups, according to desirability. The first group, deduction made of enough of the product to pay transportation on the crop, will raise and send to market 28 bushels of wheat per acre, the second 24, the others 20, 16, 12, 8, and 4, respectively. Now, if the people are few and need but a small part of the land, they

will naturally cultivate A, or the land which best combines fertility and accessibility. So long as there is enough of this land there cannot well be any rent, for a man will not pay rent for what he can get for nothing. But the time comes when more land is needed, and cultivation must begin in group B.* Land is still free there, but all of group A is taken. If now a man insists upon cultivating land in group A he must pay for the privilege, for the owner will not consent to move off onto poorer land unless he can maintain his advantage. How much is this advantage? Four bushels per acre, for labor alone working upon free land can produce only 24 bushels. The land in B, which is free, is now the "margin of cultivation," that is, the grade of land which will pay for cultivation, and no more. The natural reward of labor in agriculture is the total return to cultivation on the margin of cultivation, after deductions are made on account of the returns to capital and its replacement. This advantage which the owners of A land now have over the tillers of free land, whether they let the land or not, is rent. The amount per acre at this point will be the market price of four bushels of wheat.

With the development of population more land is needed, the margin of cultivation descends to C land, the reward of simple labor is diminished, and rent increases. B land now pays a rent of four bushels and A land a rent of eight

*It of course hardly need be said that there is no such gradation of land as is represented in Fig. 4. The real variation would be more nearly rep-

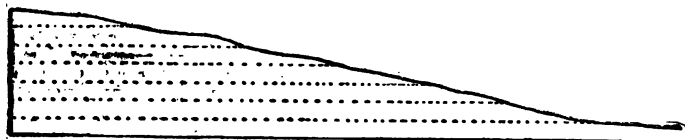


Fig. 5.

resented by a figure like Fig. 5. If we consider city lots, also, the extremes of value would be immensely greater than is here represented. These facts, however, do not alter the principle.

bushels per acre. When the margin of cultivation has extended to E, rents on B land equal one half and on A land four sevenths of the entire product. It is clear that at this point the productivity of groups E, F, and G may be had for the taking. A moment's reflection will show that a portion of the productivity of the other groups may also be had free.

Rent with no Free Land.—Continuing the descent of the margin of cultivation down from E to F and G, we can easily imagine a time when all land should be called for and no free land would be left. Following the law already explained, rent would absorb more and more of the product, until, with the disappearance of free land, the entire product would be consumed as rent. This is of course possible if the owners of the land cultivate it with their own hands. In this case rent is indistinguishable from return to labor, the only difference being that owners of the best land are better rewarded than the others. But this direct cultivation by owners is very far from general. Long before land is wholly taken up in any country a great deal of it is held by men who do not cultivate it with their hands but who lease it to others. In this case the owner or landlord appropriates the rent, leaving the free productivity to the tenant as the reward of his labor. As rent increases the margin of free productivity decreases. But there is clearly a limit to this, for tenants cannot work for nothing and turn all the product over to the landlord. Rent may pass down the scale, say to E or possibly to F, but it must stop at a point where the tenant will have enough to live. Thus it is that even in countries which long ago had need of all their land some land bears little or no rent. Under existing methods of cultivation a man cannot pay a rent for it and live off its produce. We may thus picture to ourselves the law of rent as an advancing force which slowly but surely carries everything before it until it is met by the law of wages* which checks and finally arrests its progress. This arrest of the progress

* Of course there must be at least a minimum return to capital, but that is here neglected as a minor factor.

of rent practically means that the poorest land, land which will not pay rent or even repay cultivation, is only nominally appropriated or appropriated for other than purposes of production.

Intensive Cultivation.—Returning to our figure, let us place ourselves again at the point where all the A land is taken and new members of society are looking for more land. We have assumed that they will take up land in the second group. This is not necessary, however. More labor may be put on the land already cultivated and more will be raised. Suppose that ten men cultivate 100 acres of A land, raising 2,800 bushels of wheat. But the numbers increase, and to each such group one more is added. As the cultivation was, of course, imperfect additional labor increases the crop. The eleven men raise 3,060 bushels; that is, the eleventh man has raised 260 bushels; not so much as the others raise, but 20 bushels more than he could have raised on B land. Of course the owner gives him only so much as he could get elsewhere and secures an additional rent of 20 bushels. Encouraged by this, he hires a twelfth man and secures a crop of 3,280 bushels. The two extra men have raised 480 bushels by their labor; but this is just what the landowner had to pay them for their labor. He therefore finds that while one additional man increases his rent two do not, and discharges the second, who takes up free land. Thus as numbers increase a part of the increase aids in intensifying the cultivation of the old land, while another part takes up new land. With each fall in the margin of cultivation more labor may be profitably employed on land already cultivated. Thus our landowner who could not afford to employ a twelfth man at 240 bushels wage can employ a thirteenth or possibly more when the return to labor falls to 200 bushels. *Each addition of labor (or capital) in the cultivation of land increases the return, but not in the same proportion.* This is the law of “DIMINISHING RETURNS,” one of the most stern-visaged laws in economics, which indicates that, other things being equal, each addition to the number of human beings on the earth, beyond a certain number at least, makes harder the process

by which man draws his sustenance from the earth. Before this certain number is reached the law of diminishing returns does not begin to operate, but one of increasing returns obtains. We may suppose that up to the tenth man in the example given every man added more than the previous to the product as a certain number of men is needed for the most effective organization of production. The law of increasing and diminishing returns would be represented by a diagram somewhat like Fig. 6.

The inclosed areas represent returns to each unit of productive energy, and at E the maximum is reached and the law of diminishing returns begins to operate. As we shall see, however, other things are not equal, and this law is partially counteracted by another.

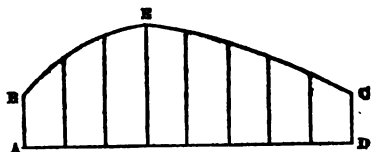


Fig. 6.

It is to be noticed that the power of rent to make laborers work for an ever smaller return is due, not chiefly to nature, but rather to the institution of private property. So great has the hardship of rent seemed to some that it has been proposed that society should appropriate rents through the mechanism of government, or, what amounts to the same thing, that private ownership of land should be abolished. This proposition we shall consider later.

All improvements in the methods of agriculture increase the product more than they increase the cost. The population can thus live on less land, and poorer land is thrown out of cultivation, as to-day in our New England States. Thus the margin of cultivation is raised and rent decreases. As a matter of fact, however, in old countries this is only a temporary result. The population is sure to increase, and this usually at so rapid a rate as to keep pace with improvements. Not only does the margin of cultivation not rise, but it may actually fall, because, with better knowledge and methods, poorer land will repay cultivation and the additional cultivators are sure to be forthcoming. When land is all taken,

rent, as we have seen, is limited by the law of wages only, and if the improvement here is less than in methods of cultivation, as has often been the case, the landowner may not only have larger product, but a larger percentage of the product. If we were dealing with the law of rent as an isolated force, the tendency of improvements in land cultivation would undoubtedly be to decrease rent; but considering society as it is, the tendency may be the reverse. All development of production subsequent to agriculture, by which raw materials receive an increasingly large amount of labor, tends to improve the lot of labor.

Rent and Value (or Price).—Rent has no influence whatever on the value of products, although a large part of this value goes to the landowner. This will be clear when we recall the nature of value already explained. Value is due to unsatisfied wants or desires. It is human desires which, becoming more numerous and more clamorous, force cultivation down to poorer and poorer lands. If men do not want wheat sufficiently to give a man for twelve bushels of it as much to satisfy his wants as he could get in the same time in some other way he will not cultivate the twelve bushel land. If they do he will. Thus the extent of cultivation measures the strength of human desire in this line and determines value. When desire makes wheat valuable enough to pay for cultivating this poor land it will be cultivated, not before; but it is desire, not the cultivation, which gives wheat its value. The fact that some land produces wheat easily and pays a large rent to its owner has no effect on value. Men cannot be expected to sell wheat below the price fixed by human desires just because they got it easily, and if they did the millers would simply add the difference to their profits. The abolition of rent payment, or the appropriation of rent by the public instead of by private persons, might have a great influence on the economic life of society, but it would not have any direct influence in lowering the price of agricultural products.

SUMMARY.

1. Rent is that portion of the product of land which is in excess of the product of the poorest land under cultivation.
2. So long as good land exists in excess of all demand (free land), rent is determined by the excess of product over that of the best free land.
3. When land is all taken, and all is cultivated which will repay cost, rent is determined by the excess of product over the necessities of laborers as determined by the law of wages.
4. Increased demand for the products of the soil may result in the cultivation of more land (extensive cultivation), or in the application of more labor and capital to that already in cultivation (intensive cultivation).
5. Each addition of labor or capital in the cultivation of land beyond a certain point increases the return, but not in the same proportion (the law of "diminishing returns").
6. Improvements in agriculture, with free land and a stationary population, would decrease rent, but in old countries, and with an increasing population the opposite result may take place.
7. Value and price are not affected by rent.

QUESTIONS.

1. On what is rent based? If all land were equally good would it bear rent while free land existed? Why?
2. How is the amount of rent determined while free land exists? How is the reward of labor determined?
3. What limits rent when land is all taken? What would rent then be if the law of rent operated unchecked?
4. What is meant by intensive cultivation? What determines how far it will pay? What is the law of diminishing returns?
5. What is the margin of cultivation? What effect does a lowering of the margin of cultivation have upon intensivity of cultivation? Why?
6. What is the effect of improvements in cultivation, so far as the law of rent alone is concerned? What is the effect in an old country where population is increasing? Why?
7. What is the effect of the development of production subsequent to agriculture? Why?
8. What effect has rent on price or value? Why?

LITERATURE.

See works already cited at the close of the preceding chapter.

CHAPTER III.

WAGES.

WE have seen that of the factors which contribute to production land and labor are the two primary ones. Having discussed rent, or the portion of the product allotted to the owners of land, we next consider wages, the portion allotted to labor. In the case of simple agriculture, where labor and land are the only factors (capital playing often an insignificant rôle), we have seen that wages are determined by the productivity of free land so long as free land exists which will produce in excess of the absolute needs of labor. Workmen in other industries, too, will have their wages determined by the same rule, for they are not likely to accept less than they could earn by working free land. But, as we have seen, there comes a time when with the increase of population the margin of cultivation drops to a point where it encounters a definite resistance in the shape of a law of wages which will not be forced down beyond a certain point. It is this law of wages which we have now to consider.

It follows from the law of value that if wage-earners did and could exist in excess of all demand, their services, if fully offered, would have no value, and wages would be nothing. On the other hand, if they were few and much desired, only the intenser wants could be satisfied, and the value of labor would be very high. We see, then, that the value of labor depends upon two things: first, the number of wage-earners; second, the desire for labor. We must consider the forces which determine these two.

The Number of Wage-earners.—We have already noticed the tendency of the human race to multiply. Beyond all doubt the desire of marriage and family is one of the

strongest and most universal of human desires. But over against this desire are offset many others, such as the desire of food, clothing, and a multitude of other things, desires of every variety of importance, which, of course, are arranged and satisfied in the order of their importance. No sane man satisfies weaker desires at the expense of stronger ones. Now, in this list of desires marriage must take its place according to its importance. This varies with individuals. Food, clothing, and shelter almost necessarily take precedence of marriage, though with very varying ideas as to the necessary amount. Some will regard education, books, luxuries in dress and household furnishings, art, or even a simple bank account, as more important than marriage, and will forego the latter for the sake of the former. *The number and character of the wants which a man considers more important than marriage and family constitute his "standard of life."** Whenever on the downward scale wages fall below the point where the standard of life can be maintained for a family, the workman will do without the family and maintain the standard of life for himself alone. This fact of everyday experience is observed especially among those whose standard of life is somewhat superior to that of the ordinary wage-earner, as, for instance, clerks. It is proverbial that they do not marry as soon as they would like on account of their small income. In the great shop in Paris known as the *Bon Marché*, the widow of the founder left at

*It may be objected that this definition limits to a single relation a fact which affects human life in many other connections. This limitation is, however, intentional. While a man's wants may affect his action in many ways, it is only as they lead men to refuse to bring beings into existence except under certain conditions of subsistence that these wants become a "standard of life." The standard of life thus constitutes a sort of "ultra-matimum" on the part of laborers, a limit below which they will indeed work if they must, but below which they will not, perhaps cannot, maintain their numbers. Of course it more often limits the size of a family than prevents its formation. A general lowering of the standard of life, an increased indifference as to the fate of our posterity, is the most appalling possibility suggested by our science.

her death to each of the three thousand employees a sum varying from \$200 to \$2,000, according to their term of service. An immediate result of the legacy was seventy-nine marriages among the employees of the institution. These people, finding it impossible heretofore to marry without lowering their standard of life, remained single until this legacy made it possible to do so.

Economic Importance of the Standard of Life.—It is plain that the standard of life by restricting marriage limits the number of wage receivers, and so tends to increase the value of labor. If we were to adopt the conception of economics which many writers have unconsciously followed, as the science which treats of *employers* in their relation to wealth, the maintenance of a high standard of life for workmen might seem undesirable. So long as employers look upon the rest of animate creation as composed of varieties of quadruped and biped cattle, designed for their service, the only standard of life which they will consider is one which will maintain a certain standard of working efficiency. The distinction between biped and quadruped will hardly be considered. This is the natural standard under a system of slavery. It shocks us to-day to hear the allegation that slaveowners * once discussed in convention the expediency of using a slave up in six years or four years in a certain occupation, and decided that it "paid" to use him up in four. But how much better is it when employers discuss the desirability and necessity of keeping an army of men unemployed in America in order to "keep down the price of labor?" Whether these reported discussions ever occurred or not it is hard to determine, but there can be no doubt that they represent an attitude of mind which has widely prevailed in human society. The brutality of such propositions comes from a false conception of laborers as a class of men *who have no right to exist for their own sake*. It is some-

* It must not be supposed that this correctly represented the ordinary slaveowner in the United States. Most slaveowners in our South had the welfare of their slaves at heart.

times objected that economics should not consider such questions. Why not? It is the science of man in his relations to wealth; not of *some* men in *some* of their relations to wealth, but of *all* men in *all* their relations to wealth. It is fundamental to an understanding of economic life, not to mention the solution of economic problems in society, to know whether all men are men with wants entitled to final consideration and maximum satisfaction, or only some men are men and the rest a variety of cattle or productive machine.

But even economic considerations from the employer's standpoint condemn the policy of depressing the standard of life. We now know that in the advanced stage of industrial development slavery is unprofitable even to slaveowners. This is only a phase of the larger truth that labor, to attain its highest efficiency, depends upon the development of intelligence and character as well as upon brawn. Too much emphasis cannot be laid on the phrase recently become familiar, that "cheap labor is dear labor." "To keep down wages" means to decrease the efficiency of labor in the long run by an even greater amount.

This brings us to a point suggested before. The value of labor is determined not only by its amount, but also by the wants which it is called upon to satisfy. Now, who calls for labor—that is, for the goods which labor produces? Evidently society, in the person of *all* its members. The immense majority of these are laborers. To keep down their standard of life means in so far to limit the amount of goods they can call for, and thus narrow the field of industrial action and the possibility of employers' profits. It is true that by this lowering of the standard of life more laborers are brought into existence, and labor partly makes up in quantity what it loses in quality; but it is doubtful if even then the employer is benefited. The policy of keeping down the standard of life is therefore economically false. It curtails the means of life and with it the development of life, and results in enforced idleness, inevitable inefficiency, and neces-

sary poverty. Its advantage is that it *temporarily* profits *individual* employers.

Social Importance of the Standard of Life.—This will need but few words after what has been said. The proper goal of society in every line is to make life increasingly worth living for all its members. We are forced to ask in such connections, In what does national prosperity consist? Certainly not in simple resources. A million dollars is not necessarily affluence. It depends upon the number who share it. Still less does prosperity depend on simple numbers. There is no gain in exchanging happy fewness for multitudinous misery. Least of all can a nation's prosperity be measured by the affluence of a few resting on a substratum of general poverty. That nation is most prosperous which shows the highest average in the ordering and furnishing of individual lives. To this end it is indispensable that the general standard of life should be raised as high as possible. Man must have as many wholesome wants as is consistent with the existing possibilities of production. Such an increase means an increase of wages, an increase of consumption, an increase of production, an increase of individual and social well-being. This is very different from saying that men need simply an increase of wages. Only so far as there is a developed set of wants in a man can he spend wisely as regards himself or society. The result of a *sudden* increase means usually increased vice at first, and later simply a larger number of beings living at the old scale of misery. Such a change is a positive disaster, devoting the increased productivity of the country to the extension of misery rather than to the extension of well-being. And yet an increase of wages is essential to any wholesome development of wants. The only essential is that education in many lines should accompany increase of wages. Every new invention, every new discovery of resources, every possible addition to our productivity, may be utilized for the improvement and not simply for the multiplication of our people. The course of action to be pursued admits of no

doubt if a man hopes or cares to improve the condition of men. *Men (all men) must be encouraged to want and enabled to satisfy all wholesome wants as fully as the development of productivity will allow. We must raise the standard of life.*

It must be observed in conclusion that employers themselves are the victims of an attempt on the part of society to establish an unethical equilibrium of balanced self-interest, an effort which has given one man in twenty, through the power of competition, the ability to dictate a code of oppression to the nineteen employers who are more humane than he. That such a system should be disastrous in its working and require serious modification is the lesson both of reason and of modern experience. *The problem of the twentieth man*, the mean man, who coerces nineteen others against their will to follow his meanness, is one of the most serious problems in the field of applied economics.

In the next chapter we shall consider some of the causes which have operated to raise the standard of life of the wage-earning classes.

SUMMARY.

1. So long as free land exists wages are determined by the product on the best unappropriated land.

2. Since the value of labor, as of all other goods, is determined by the desire for it, the amount offered is an important factor in determining wages.

3. The increase of the laboring population is determined by its "standard of life," that is, by the number and character of the wants which are considered more important than marriage and family.

4. An effort to depress the standard of life can be of advantage only to employers, and that only temporarily. It eventually diminishes the demand for all goods.

5. From the standpoint of society it is of the utmost importance that the wants of *all* should be increased as rapidly as social productivity will allow.

QUESTIONS.

1. Mention one cause of high wages in America.
2. Why do wages tend to fall to the limit of subsistence?
3. What is meant by the standard of life?
4. Why is cheap labor dear labor?
5. Is it for the interest of employers to lower the standard of life? In what sense? Why do not employers consult their general and permanent interests? (This last needs a very thoughtful answer.)
6. What is the interest of society in this matter? Why?
7. What is meant by the problem of the twentieth man?

LITERATURE.

See works already cited for previous chapters; also:

Walker, F. A.: *The Wages Question*.

Gunton, G.: *Wealth and Progress*.

Schoenhof, J.: *Industrial Situation and the Question of Wages*.

CHAPTER IV.

THE LABOR MOVEMENT.

It is a matter for regret that in a book like this so little notice can be taken of the efforts, often heroic and largely successful, of individual employers to benefit workmen. Such efforts, though very important in the aggregate, are hard to get at, and so various that the principles involved cannot be analyzed or even mentioned in an elementary work. A single important exception will be considered later. It is not surprising, however, that the most important movement to raise the standard of life of wage-earners has originated with workmen themselves.

Labor Organizations.—The old mediæval guilds were organizations of all the factors of production. Employers and employed united in one body regulated production, but the control rested chiefly with the masters. Modern labor organizations embrace, as a rule, only one of the factors, the employed, and their purpose is to promote the interests of this one factor whenever those interests clash with those of the employers.

Trades Unions and Knights of Labor.—Labor organizations may be divided into two classes, and as a matter of fact they are so divided to-day in the United States. These classes are the trades unions and the Knights of Labor. The trades unions are primarily organizations of skilled artisans. According to the old trades union idea, each craft should be organized by itself. The Knights of Labor are, according to their original idea, organizations of employees both skilled and unskilled, regardless of trade. They aim to break down the barriers to common action found in differences of occupation. The Knights of Labor have

also taken a broader outlook upon society, and have sought to accomplish greater things than the trades unions. The trades unions presuppose a difference of interest between employers and employed. They are, as it were, a fighting body. This divergence of interests exists, and fighting bodies often preserve peace. "If you would have peace prepare for war" is an old maxim, and struggles between labor and capital have been most violent in Belgium, where no efficient organizations have existed. But the Knights of Labor have looked beyond a period of conflict to a union of productive factors which should be peaceful. They hope in some way to see labor and capital united in the same hands. They desire to make capitalists of wage-earners and to organize production on a coöperative basis. It is doubtless on account of this ultimate aim that they admit employers, of whom many are members, and also the professional classes, a considerable number of teachers, journalists, and preachers being also members. The Knights of Labor are in so far a return to the principle of the old guild association.

Knights of Labor and trades unions have both modified their original programs. The trades unions have united in larger federal organizations, first in the central labor unions of our cities, and later in the national body, the American Federation of Labor. This national body has also made provision for the organization of unskilled workingmen, and for local unions of workingmen of different trades where those engaged in each trade are too few for separate organization. The Knights of Labor have, on the other hand, organized separately a considerable number of trades in what are often called "district assemblies," and have thus recognized more largely than they were at first inclined to do the principle of federation with separate crafts as a basis.

A bitter contest between the Knights of Labor and trades unions has been waged, but there is now some evidence of an effective desire for harmonious coöperation in the prosecution of common aims.

Growth of Labor Organizations.—It has been esti-

mated that at least a million workingmen in the United States are members of labor organizations. The number, of course, varies. A period of prosperity for the organizations is generally followed by one of reaction, and the present seems to be a period of recovery from the period of reaction which began early in 1886, perhaps in 1885, and continued for several years. Reaction always terminates in a new advance, and thus far in the United States each new advance has carried the labor organizations farther forward than ever before.

Farmers' Organizations.—There are two powerful organizations of farmers, the Patrons of Husbandry and the National Farmers' Alliance and Industrial Union, the latter the more radical and the more inclined to political action outside of the two old parties, especially to political action with the third party, called the Populist. These farmers' organizations are more like the old guilds in this, that they are organizations of independent producers designed to protect their interests against attacks from other social classes. Recent years have, however, witnessed an approach of labor organizations and farmers' organizations to each other for the attainment especially of common political aims.

Labor Organizations a Natural Growth.—Labor organizations are not forced products. They have grown up almost spontaneously. They have arisen naturally out of modern industrial conditions. Wherever capital is a separate factor in production, and is organized on a large scale, labor inevitably organizes itself sooner or later in order that it may stand on an equal footing and make labor contracts advantageously for itself. Let us suppose one capitalist employs a thousand men. If these men are not organized each man individually treats with all the capital in the establishment. All the capital is represented by one man, but one workman represents but a thousandth part of the labor force, and he is not in a position of equality. The workmen therefore unite their labor, and speaking through one representative place all the labor against all the capital. This is something which

so naturally suggests itself that we find labor organizations in all modern lands.

Opposition to Labor Organizations.—Labor organizations met at first with violent opposition, and it cannot be said that in their earlier stages or even in their later growth this opposition is by any means groundless. However, whatever bad traits naturally characterize labor organizations are aggravated so long as they are obliged to struggle for existence. Whenever the fact of their right to exist is frankly acknowledged, and employers, ceasing to persecute them or their officials, recognize the man who treats in a representative capacity for the sale of the commodity labor as courteously as they would an agent for the sale of corn or wheat; finally, whenever courts cease to harass them with legal chicanery, as courts long did in England, they tend to become strong and conservative. The fact is undoubted that most serious abuses and outrages have attended the progress of labor organizations, but they have simply exhibited weaknesses of frail human nature and weaknesses which have been observed in more frightful manifestations in those other organizations, nevertheless excellent, which we call Church and State. The true course is to recognize the beneficence of the principle of organization and to contend only against abuses. It can scarcely be too much to say that this is the opinion of nearly all competent observers in England, Germany, and the United States. The following quotation about labor organizations from *Work and Wages*, by the late Professor Thorold Rogers, of Oxford, not only expresses the view of many scholars and business men, but illustrates a common change of attitude on the part of many fair-minded persons who have seen previous prejudices against labor organizations displaced by a careful examination of their claims: "These institutions were repressed with passionate violence and malignant watchfulness so long as it was possible to do so. When it was necessary to relax the severities of the older laws they were still persecuted by legal chicanery whenever oppression could on any pretext be justified. As

they were slowly emancipated they have constantly been the object of alarmist calumnies and sinister predictions. I do not speak of the language of newspapers and reviewers, which simply re-echoed the passions of the hour ; far graver were the allegations of Senior and Thornton. . . . I confess to at one time having viewed them suspiciously ; but a long study of the history of labor has convinced me that they are not only the best friends of the workman but the best agency for the employer and the public ; and that to the extension of these associations political economists and statesmen must look for the solution of some among the most pressing and difficult problems of our times."

It may be proper to state that while the author does not hope for so much as Professor Rogers seems to from labor organizations alone, his experience has in the main been the same.

Space is too limited to permit an explanation of the immeasurable misapprehensions of the general public in regard to labor organizations. One of them is that innocent and peace-loving workingmen, perfectly contented, are misled by agitators who have been placed at the head of labor organizations. Careful observation will show that the influence of labor leaders is conservative on the whole, and that strikes originate among the masses and are generally resisted by the leaders so long as it is possible. It will also show that leaders are readier than a large proportion of the "rank and file" in the organizations to terminate strikes.

Success and Failure of Strikes.—Strikes produce harm, and every effort should be made to avoid them. They are, however, successful in more cases than is ordinarily supposed, and when occasionally a decided victory is scored the gain is immense. An agitation of a few weeks and a strike of a few days, together with an act of legislature, established a reduction of the hours of labor from seventeen to twelve for the hundreds of street-car employees in Baltimore. This is probably an advantage permanently secured. Other illustrations might be given, and nothing is gained by shutting our eyes to such facts.

Violence is disastrous, and the welfare of the masses can only be secured by peaceful measures. While condemning in deserved terms violence, which too often accompanies strikes and which reacts against workingmen, it is only fair to recognize the fact that this violence is largely due to criminal classes in cities which improve such opportunities for disturbance, and not wholly to the workingmen. It is manifest, however, that, even so, it is only another argument against strikes wherever they can be avoided, and for the settlement of differences between labor and capital by peaceful arbitration.

Temperance.—Nearly all labor organizations are temperance societies, and many of their officers are total abstainers. They have greatly diminished intemperance among those who belong to them.

Educational Value.—Their educational value is also noteworthy. The debates and discussions which they foster stimulate the intellect and do much to counteract the deadening effects of a widely extended division of labor.

Labor organizations bring men and frequently also women together and furnish opportunities for social culture. Temptations to coarse indulgence are thereby lessened, and an important side of human nature receives better opportunity for development.

It is here especially that labor organizations are to find their justification. It is often objected that they try to exclude worthy men from their limited number and seek by distressing a part of their number to raise the wages of the rest. What they are really trying to do is to raise the workman's standard of life, which implies that betterment shall take the place of multiplication and wants be allowed room to increase. It is said that the limitation of numbers in one trade can only overcrowd others, and that if all trades were successfully organized nothing would be gained. Such an objection overlooks the fact that the operation of the union tends to check imprudence and maintain a just balance between numbers and the means of development. No purpose could

be more laudable, though it cannot be said that it is always wisely or successfully pursued.

It may be hoped that labor organizations are preparing the way for a better civilization. Certainly one of the most hopeful features of the situation is the willingness of organized workmen to listen to strong and manly words from those who understand their real purposes, who go among them and, with sympathy for their just aspirations, endeavor to help them to distinguish between the foolish and the wise, the wrong and the right, to show them how to pursue the good, and to inspire them with faith in that righteousness which alone can exalt the masses in a nation ; that is, the nation as a whole.

Weaknesses of Labor Organizations.—Some of the weaknesses of labor organizations have already been intimated. These weaknesses are partly inherent and partly accidental, and it may be well to summarize them.

1. *Based on Strife.*—They are as a rule based on strife. They aim to prepare their members for industrial war. Now we must hope for peace in society, and an organization which does not look beyond contention to a cessation of strife has inherent in it a certain weakness.

Apart from all other considerations, it should be noticed that strife inconveniences the general public, and even when the real blame rests upon employers, as happens often enough, the workmen appear before the public as the aggressors. They are the ones who refuse to accept certain conditions of employment, and necessarily they try to induce others to act with them. The general public is not apt to examine carefully into the real merits of the case and to analyze conduct minutely; consequently the workmen are held responsible. It will be noticed that if the public is inconvenienced seriously for any length of time, as happens particularly in the case of strikes on railways, gas works, and the like, although sympathy may have been at first with the workmen, the public at large soon grows weary and impatient and shifts its sympathy to the employers. Public opinion can make

itself felt through legislative acts and judicial decisions and thus hurt organized labor.

It may be admitted, on the other hand, that there has been a gratifying growth of other features than war features in labor organizations generally, both in other countries and our own. The Knights of Labor, as already mentioned, in their declaration of principles at least, emphasize the desirability of measures designed to secure social harmony.

2. *Limitation of their Benefits.*—They have been, particularly in the past, at least, partial monopolies. Not infrequently have they sought to gain benefits by an exclusive policy. It is only recently that attention has been given to the organization of unskilled laborers, and for this extension credit is due in England to the “new trades-unionism,” as it is called, and in this country especially to the Knights of Labor. It has been well said by John Stuart Mill that in earlier times partial monopoly in trades unions might be justified as a policy, because it might then have been possible to elevate only a few out of the great mass; but that now the time had come for broader measures. While there has been improvement, it must be admitted also that there is a reason for limitation of numbers which is not always apparent at once. Unscrupulous employers have at times sought to increase unduly the number in a single occupation in order to have a reserve force of unemployed workmen from whom to draw in time of need and thus to keep down wages.

3. *Production Not Directly Increased.*—It is to be noticed furthermore that labor organizations as such do not directly increase production, nor do they as such diminish the wastes of competition. What must be desired is not merely that a greater proportion of wealth should fall to the wage-earning classes, but that the total national dividend to be distributed among all should be increased.

4. *Their Ultra-conservatism.*—This is an objection which will sound strange to many, yet it has often been found that these organizations have clung to old methods and have been disinclined to favor progress which has not immediately

benefited them as labor organizations. This weakness is closely related to that which follows.

5. *They often Take Narrow and Short-sighted Views.*—It has been one of the weaknesses of labor organizations in general that they have not been sufficiently interested in public measures and in reforms designed to benefit society as a whole, the wage-earners included. They have not given sufficient attention, for example, to sanitary measures, and have not supported adequately public health authorities in their efforts to benefit especially the poorer classes in the community. It has been frequently observed that they underestimate the importance of pure politics and a highly trained stable civil service, although they are the ones above all others to gain from such measures. At times they have favored measures ultimately injurious because such measures have increased temporarily the supply of work. This, for example, was the case with those labor organizations in Baltimore which petitioned the municipal authorities to grant a franchise to a competing gas company because it would give them work. The opposition to labor-saving machinery also falls under this head. It may be wise for labor organizations to attempt to gain greater benefits from such mechanical improvements and to minimize the evils, but not to oppose improvements.

6. *Lack of Flexibility.*—Labor organizations share the weakness which is common to all great political and social organizations. It is necessary to act according to general rules for the most part, and it is difficult to take account of individual cases. One who examines into the nature of labor organizations can see many reasons why union men refuse to work with non-union men. The union entails certain expenses, and it is claimed that non-union men receive the benefit of organization without bearing any part of the burden. More serious, however, is the danger that unscrupulous employers will gradually substitute non-union men for men who are strong in the organizations, and thus break down the organizations before the workmen really

perceive what is going on. Pretext can easily be found to discharge an obnoxious workman, however faithful and efficient he may be. Yet it must be admitted that sometimes wrong is done to workmen who have the best intentions with respect to their fellow-workmen and are entirely willing to bear their share of the burdens of common action. There are workmen who, on account of their religious views or for other reasons, have conscientious scruples against membership in one or another organization, or perhaps all labor organizations. Employers have refused to recognize unions because it would compel them to discharge efficient workmen. While recognizing the difficulties in the situation, it would seem that it ought to be possible to devise plans which would take account of exceptional but, after all, frequently recurring cases.

7. *Not Capable of Political Government.*—Labor organizations have at times conveyed the impression that government ought to belong to them. It would seem that their best friend ought in all sincerity to counsel them that whatever the cause may be, and however much the fact may be regretted, they have not the trained intelligence and the moral strength to govern the country. The labor organizations are useful, and they give us the standpoint from which to judge public measures. Whatever benefits the wage-earner truly and permanently is likely to benefit the country as a whole; but the tendency to favor workingmen for office is not one which can be encouraged as a reform. The appointment of workingmen to office is often used by demagogues in power to turn attention away from genuine reforms. The appointment of one workingman out of a thousand to a political office does not help the remainder. What the workingmen need is the best men possible in office.

It should be said in conclusion that the election of thoughtful and intelligent workmen to legislative bodies, whether local, State, or national, is to be viewed differently from the appointment to administrative office. Legislative bodies

should include representatives of all social and industrial classes, and highly trained administrative officers should carry out their behests. Do the workmen desire inferior public servants—public servants whom great corporations would not employ?

SUMMARY.

1. Modern labor organizations embrace generally a single factor of production rather than a trade like the ancient guilds.

2. The Knights of Labor, however, in contrast with the federated labor unions, admit others than wage-earners, and partly ignore trade lines.

3. Farmers' organizations have rapidly developed of late, and have become a powerful political factor.

4. Labor organizations are a natural outgrowth of our industrial system with its centralized capital.

5. Labor organizations were first subject to violent opposition with an emphasis of their obnoxious features. With a partial removal of opposition they have become more conservative and helpful.

6. Strikes are an expensive but often successful means of advancing labor interests.

7. The principal value of labor organizations is that of education and the promotion of temperance.

8. The weakness of labor organizations consists in their hostile attitude, their exclusiveness, their unproductive character, their ultra-conservatism, their short-sightedness, their lack of flexibility, and their indifference to political reform in the larger sense.

QUESTIONS.

1. What two kinds of labor organizations have we to-day? How does each differ from the ancient guild?

2. What changes are going on in both kinds of labor organizations? What seems likely to be the eventual basis of labor organization?

3. What two principal farmers' organizations have been developed, and what are the characteristics of each?

4. What has been the political outcome of these organizations? What organizations have contributed to this?

5. Why have labor organizations developed so rapidly? Why have they developed so spasmodically?

6. What is a strike? What are its advantages? its disadvantages? What is the attitude of labor leaders toward it?

7. What was the attitude of the public toward labor organizations at first? What was the result? Why?

8. What are the weaknesses of labor organizations?

LITERATURE.

Clark, J. B.: *The Philosophy of Wealth*. Chapter VIII.

McNeill, Geo. E.: *The Labor Movement, the Problem of To-day*.

Jevons, W. S.: *The State in Relation to Labor*, especially Chapters IV, V, and VII.

Rogers, Thorold: *Work and Wages*.

Ely, R. T.: *Labor Movement in America*.

CHAPTER V.

PROFIT SHARING AND COÖPERATION.

Profit Sharing in the United States.—Labor organizations strive to secure higher wages for workingmen than they would otherwise obtain, and thus to increase their share of the products of industry. Profit sharing goes a step further than labor organizations. Those who advocate profit sharing wish wage-earners to secure a portion of profits in addition to ordinary wages. It is held that this arrangement promotes economical use of material and machinery by employees, and generally increases their zeal and efficiency. The result is a larger total product and a larger revenue for the wage-receivers. Profit sharing has been extensively tried in the United States, and it has been successfully introduced by some of the largest productive establishments in the country. Recent testimony of American employers who have tried it is very generally in its favor, although one prominent manufacturer abandoned it, and one or two have not found that it quite realized their expectations. Some influential employers appear to be enthusiastic in their praise of its practical working, and a member of a firm which has distributed over one hundred thousand dollars of profits to its employees writes to the author that he and his partners consider it the best investment that they ever made. He thinks that they have the most loyal set of workingmen in the world. Instances recorded in three months showed that at least ten thousand workingmen had in that period been admitted to a share in profits in the United States.

Profit sharing may be extended to capital sharing—partial ownership of capital by workingmen and participation in management. The large manufacturing establishment of

Godin, in Guise, France, serves as the best example which occurs to the author. M. Godin gradually educated a large body of working-people to that point where they could take a part in the management of his large business, and at the same time encouraged them to acquire a part of the capital. If recent reports are trustworthy the workingmen have finally acquired and now manage the entire business.

If we call industry, as ordinarily organized in our great mercantile and manufacturing establishments, despotism, we may call an establishment where laborers participate in capital ownership and management, under the chief control of some one who is recognized as an industrial superior, a constitutional monarchy. These terms, although indicative of mere analogies, are, after all, instructive. The despotic principle, the one-man power, both in politics and in industry, is an excellent thing in its own time and place, and in industry it has necessarily continued longer than in the political sphere. It is a phase of development, but it ought not to be regarded as final. A large part of the industrial troubles of modern society undoubtedly find their origin in the fact that development of the economic department of social life has proceeded more slowly than the development of other departments. Elsewhere the despotic principle has been softened or displaced, but continuing in the economic sphere it is a discordant element; yet it is difficult for most of us to see how for a long time to come we can wholly dispense with the one-man principle in industry. It should, however, be softened as far as practicable, and men should be gradually trained to understand industrial republicanism or democracy. M. Godin has set a noble example.

Industrial democracy means self-rule, self-control, the self-direction of the masses in their efforts to gain a livelihood. Industrial democracy is industrial self-government, and this is found in pure coöperation.

Coöperation is of two kinds: coercive, which means governmental action, and voluntary. We have here to do

with voluntary coöperation, and this is what is usually meant when coöperation is spoken of. Workingmen combine their own capital, purchase their own plant, manage their own affairs in their own way, at their own risk, sharing profit or loss as the case may be. This is called *productive coöperation*. But we have also what is called *distributive coöperation*. Distributive coöperation means coöperation in distribution, not in the sense in which the word is used ordinarily in economics, but rather in the sense in which we might speak of a merchant's activity in distribution. He distributes wares. Distributive coöperation refers to retail and wholesale trade, and is only an imperfect form of coöperation. Purchasers of wares, groceries, dry goods, etc., combine together to purchase what they need, and thus save profits. They form a stock company, subscribe for shares, employ a manager and clerks who often do not even share in profits, and start a business. Profits are sometimes divided only on shares, but the approved way is to pay a moderate interest on capital and to divide profits between stockholders and customers in proportion to purchases, the division being made at the end of stated intervals. Some establishments in Great Britain, and doubtless elsewhere, carry out the full program, and give employees a share of profits. Profits are thus said to be divided among capital, custom, and labor.

Distributive coöperation has in England and Scotland succeeded better than productive coöperation, which has, however, met with some success. France appears to have succeeded better than England in productive coöperation. Some instances of success in the United States are recorded, and many undertakings have been partially successful; by which it is meant that they have succeeded as business undertakings, but have abandoned wholly or in part the coöperative principle. This is the case with a large stove foundry started as a coöperative foundry, and in which some workingmen or their heirs still own stock. One of the strikers among the workingmen in this establishment, in a

difficulty which arose a few years since, owned seven thousand dollars' worth of stock. The managers seemed to take it much to heart that he should strike, but it is hard not to feel a certain admiration for him, as he placed the union of his fellow-employees above his interests as a capitalist. A good example of pure coöperation is afforded by the coöperative coopers of Minneapolis, who have nearly absorbed the business of making flour barrels in that milling center. The superiority of coöperation as a business principle has in this case been demonstrated. Pure coöperation, when well established, prevents strikes by completely identifying the interests of labor and capital. It stimulates energy and encourages thrift. The self-interest which usually animates the employer alone animates all coöperators. No slighting of work can be tolerated, and, eye-service vanishing, much labor of supervision is done away with. On the other hand, divided councils often render the movements of a business clumsy, and action cannot be so quick and decisive as when one man acts on his own responsibility. Failures of coöperation have generally been due to moral defects on the part of workingmen. It has been difficult for them to act harmoniously together, and prosperity has often produced disintegration. Wherever coöperation has succeeded, however, it has produced excellent effects on character. It is a test, but when the test is stood it reacts beneficially on the coöperators. It makes men diligent, frugal, intelligent, considerate of the rights of others, as well as their own. Coöperation and temperance go hand in hand, as has been universally observed by students of coöperation.

Dr. Albert Shaw, American editor of the *Review of Reviews*, gives this testimony in regard to the coöperative coopers of Minneapolis: "The coopers are emphatic in saying that the moral effect of their coöperative movement constitutes its highest success. It has unquestionably wrought a transformation in the habits of these craftsmen. They are no longer a drunken, disreputable guild, figuring in the police courts and deserving the disfavor of the community.

They have become a responsible and respectable class of citizens."

It was once thought that corporations could not succeed, but the inherent advantages of corporate industry after a long struggle have made themselves manifest, and corporations are crushing out the individual. It is believed by some that the inherent advantages of coöperation will sooner or later make themselves felt, and that after a period of adversity, of struggle, and of slowly increasing success coöperation will finally gain industrial supremacy, thus uniting harmoniously labor and capital and ushering in an era of industrial democracy.

The Sliding Scale.—A sliding scale of wages has been introduced by a powerful trades union, the "Amalgamated Association of Iron and Steel Workers," chiefly in Pennsylvania, and it appears, until lately, to have given general satisfaction and to have kept the industrial peace better than the ordinary wages system. Wages vary with selling price of the product, and thus labor shares to some extent in the prosperity of capital. The sliding scale is also known elsewhere in this country and in England, and it has met with a good deal of favor from economic writers.

Piecework.—This is a modification of the wage system, which has in it at least a suggestion of profit sharing, as the wage-earner receives in proportion to what he does, not in proportion to time spent. Payment by the piece would seem to be fairer for all parties, but abuses have in manufactures so generally been connected with it that it is opposed by many intelligent artisans, and careful political economists will be slow to give piecework unqualified approval. Physicians testify that by producing feverish overexertion it has in certain quarters shortened average life materially, and there is a proverb in Saxony, Germany, to the effect that piecework is work that murders. Piecework has frequently been used to break down regulations and laws limiting the time of work, and more frequently still to bring about a reduction of wages. The workers strain every muscle and

nerve to earn high wages, and after a high rate of speed has been secured the price per piece is reduced, occasionally time and time again. Peculiarly cruel and aggravating cases of this kind have come under the writer's observation. When not connected with abuses payment by piece has many advantages, and is at times preferable for all parties.

Arbitration and Conciliation.—These have accomplished much for the preservation of industrial peace wherever thoroughly and honestly tried. Sometimes voluntary boards are appointed by employers and employees to adjust differences, and sometimes they are appointed by public authorities. The movement for governmental and compulsory arbitration will be considered in Book III.

Differences of Wages.—We have different standards of life in different occupations, consequently differences of remuneration whether paid as wages or salaries. What determines differences of wages of various occupations? All sorts of fanciful replies have been given. The differences are largely historical. We must go back to a man's grandfather or great-grandfather. Occupations where remuneration is high are so difficult to enter that few are able to surmount the difficulties. Peculiar and rare qualities are required; opportunities which come from favorable environment; an expensive training, which few parents are able and at the same time willing to give. What one is depends chiefly on one's parents, and, as has been often said, one has no voice in the selection of one's parents. We who have been blessed in this respect ought to feel that we owe a special duty to humanity.

Adam Smith enumerated the following five causes for the differences of wages in different employments: First, the agreeableness or disagreeableness of the employments themselves; secondly, the costliness or cheapness or the difficulty and expense of learning them; thirdly, the constancy or inconstancy of employment in them; fourthly, the small or great trust which must be reposed in those who exercise them; and fifthly, the probability or improbability of

success in them. All this presupposes that grown men, perfectly free to select their occupations—free not merely so far as the law is concerned, but free so far as their command of resources is concerned—look over the entire industrial field and choose their employment. A recent English writer, pointing out that occupations are selected by parents very generally, adds: "When a person is one of the large number who have been in childhood badly nourished, badly housed, badly clothed, badly educated, and not at all trained to any particular occupation, let no one prate to him of his freedom to choose what occupation he thinks proper. His legal freedom to choose many occupations is about as much use to him as his legal freedom to fly with wings in the air." Nevertheless, with proper qualifications, what Adam Smith says explains many differences in wages. It is left as an exercise to readers and students of this book to discover by observation, careful and long-continued, the real amount of truth in Adam Smith's causes for differences of wages in different employments.

Wages and Salaries.—The law of wages assumes a better form in the case of salaries where payments by the month or year take the place of payments by the day. Incidental advantages of this system of payment are: first, greater regularity of income, the less productive portion of the year being equalized with the more productive, a fact which, taking men as they are, is often of even more importance than an increase of income; and second, constancy of income, no deduction being made ordinarily for interruptions caused by sickness and other inevitable misfortunes, and vacations being often allowed. The nature of the service performed by salary-earners also gives them in general a much more favorable social position as regards their employers. It is plain, however, that these are incidental rather than fundamental differences.

Turning to the essence of the salary system in its highly developed form, we notice a marked tendency to regulate salaries not by the value of the service rendered, which is

often incalculable, as in the case of an efficient public officer or clergyman, but by the needs of the individual. A college professor, a judge, a president, all are paid with almost no reference to the benefit they confer upon society. A man who enters these callings does so with the distinct understanding that they will not allow him to accumulate wealth, but that if he succeeds they will provide for his reasonable wants. If we pay the President of the United States \$50,000 per year, it means that we consider that the nature of his function requires him to spend about that amount. Many a judge receives only a third or fourth of what he received while practicing at the bar. This tendency to regulate compensation by needs rather than by simple capacity is increasing and is wholly good. Only so can individual genius be made a benefit rather than a burden to society.

Is this principle of compensation a new law of wages? It would seem, on the contrary, to be an application of the regular law in the strictest sense, but under conditions which show its real character and possibilities. These wants which society more or less carefully considers in estimating salaries, what are they but the "standard of life" which is appropriate to the function in question? Only here society does not so generally unite in an effort to "keep down wages" as in the case of the wage-earner. It recognizes, at least partially, that to "keep down" the standard of life of its important servants is to "keep down" the quality of their services in an even greater degree. It is in the increased recognition of this principle that the hope of the wage system lies. The principle is right. Men should receive according to their wholesome wants, not according to their strength. The latter is the law among swine. But the most indubitable right we possess is the right to develop our wants, for this is the development of our life. A maximum of wholesome wants with a distribution of goods in proportion to those wants is the economic goal of society.

SUMMARY.

1. Profit sharing is a growing and apparently feasible means of improving the industrial situation.
2. A natural development leads from profit sharing to capital sharing, a preparation for industrial democracy.
3. Coöperation may be compulsory by government authority, or voluntary.
4. Voluntary coöperation may be distributive (that is, commercial) or productive.
5. Distributive coöperation has been especially successful in Great Britain.
6. Productive coöperation has succeeded better in France, and has had some success in the United States.
7. Coöperation requires and tends to develop high moral qualities on the part of coöperators. Failures are usually traceable to a lack of these qualities.
8. The sliding scale of wages adopted by Pennsylvania iron workers regulates wages according to the selling price of the product.
9. Piecework in itself is a just method of paying wages, but has been liable to grave abuse.
10. Arbitration and conciliation have been helpful in adjusting differences whenever honestly tried.
11. Differences in wages are due to many causes, largely historical, all of which may be summed up under the social obstructions of the wage-earner's environment.
12. Salaries are the best form of wages and the application of the principle of the standard of life.

QUESTIONS.

1. What is coöperation? How does it differ from profit sharing? What are the advantages of each system?
2. What is capital sharing? How does it grow out of profit sharing? What is its outcome?
3. What are the advantages of industrial democracy? the disadvantages? (Answer as thoughtfully as possible.)
4. What kinds of coöperation are there? Which is easier? Where has each been most successful?
5. Why does coöperation so often fail? Is it likely to fail continually for these reasons? Why?
6. What is the sliding scale? its advantages? its disadvantages?
7. Why is piecework fair to both parties? Why do economists and labor organizations oppose it?
8. What is the advantage, and what the weakness, of arbitration? What conditions are needed to make it a success?

9. What is the general reason for the differences of wages in different occupations? What was Adam Smith's explanation? How far was it correct?

10. In what ways do salaries differ from wages? In what ways are they identical? What are the advantages of each?

LITERATURE.

Gilman, N. P.: *Profit Sharing between Employer and Employee.*

Gilman, N. P.: *Socialism and the American Spirit.* Chapter IX.

Johns Hopkins University: *Studies in Historical and Political Science*, Sixth Series, *Coöperation in the United States.*

Jevons, W. S.: *The State in Relation to Labor.* Chapters V and VI.

Ely, R. T.: *The Labor Movement in America.* Chapter VII.

CHAPTER VI

INTEREST AND PROFITS.

WE have considered the return which under the present system of distribution accrues to land and labor. These, taken in their broadest sense, are the only original elements in production. Of course, land includes not only building lots and farming land, but mines and rivers and fisheries and, in short, all portions of the earth which contribute to production. Labor, too, is to be taken quite inclusively. We now come to the third element in production, capital, which is not an original but a derivative element. Capital, like other goods, is produced, but it is produced for the purpose of production in turn. We are concerned here only with social capital, the treatment of individual capital, when it is not at the same time social capital, coming later, as it is then not a factor of production. Now, although capital is produced, and not original, when it has once been produced and lodged in the hands of owners it acts exactly like a natural element having a power of its own to exact a return according to its own law. This return is variously known as interest, profit, and, in some languages, as rent, a term which we have confined to land.* Common usage calls the return to productive capital in the hands of an *entrepreneur* profit, while interest is the return on capital lent. This usage is thoroughly inaccurate, as each term partially includes the other, as well as one or two more elements of an entirely different nature; but here, as elsewhere, it is usually easier to redefine old terms than to adopt new ones. We must

* Sometimes the return to capital is called capital-rent.

therefore notice two or three distinct ideas commonly included under profits.

There is first the pure return to capital, a return which is paid to the owner of capital who lends it without any accompanying labor or risk. This is *interest*, and it is obvious that it is precisely the same whether a man lends capital or uses it himself in business. The return on the capital is interest, whether there is any loan or not. We shall consider it under that head, though it is usually called profit when the capital is owned by the *entrepreneur*, and even the older economists so considered it. The second element under this name is the payment for risk. Every one knows that the revenue from a given business varies much from year to year. Some years it is very high, and then again there is little, nothing at all, or even a loss. The return for a given year may be entirely abnormal. If the business is to succeed the large revenue of one year must help out the small revenue of another. So from the profits of any good year must be taken a sum to help cover past or future losses. This deduction from "profits" we call, for lack of a better word, *insurance*. This is exactly the right word except that it must not be confounded with fire insurance, etc., in which a policy is taken out and a definite premium paid. A third element in what is commonly called profits is really counterbalanced by wear and tear. The capital used has lost in value, and of course the loss must be made good by a fund for the *replacement* of capital. But the analysis may be carried still further, and for practical purposes is at times carried further. The *entrepreneur* may be paid a salary or allow himself a salary as wages of superintendence. This is, then, a fourth element. The fifth element is the *entrepreneur's* profit, a profit due to wisdom and productiveness of management. This we shall call *pure profit*. Sometimes four and five are classed together as pure profit. It is not, strictly speaking, a return upon capital as such, but it is considered here because it is conventionally included under profit. This vague term profit, which includes these five

elements, we may better designate as *gross profit*.* We have, then,

Gross Profit: { Replacement,
Insurance,
Interest,
Wages of Superintendence,
Pure Profit.

These five elements are perfectly distinguished in the book-keeping of many large business concerns, and in such establishments the first three at least are kept distinct from four and five, if no separate account is kept for wages of superintendence. The first two obviously are not profit in any true sense. They represent no permanent productive increase. We shall therefore consider only interest and pure profit, as the wages of superintendence would fall under wages or salaries.

Interest.—This is the real return to capital. By what law is its amount determined? This question has been as much discussed as any question in economics, and it is still a question which to many appears as an unsettled problem in economics. Perhaps few would like to pronounce any one of the various theories under discussion a perfect explanation. The ancients in general denied that interest rested on any justifiable law. Aristotle thought it unjust, and Cicero classed it with murder. Throughout the Middle Ages it was both condemned by the Church and prohibited by law. Nevertheless it continued to be a custom wherever commerce was developed, and with the industrial awakening of the modern period it was allowed of necessity. But, being allowed, it must needs be justified, and the explanations and justifications offered have been various as they have been unsatisfactory. Of course, these explanations have usually

* Professor W. W. Folwell, of the University of Minnesota, in his valuable syllabus of lectures entitled "Principles of Political Economy," uses "profit" in the sense of gross profit and defines it as follows: "Profit is the unascertained share of distributed produce obtained by the managing capitalist for his investment of capital, services, risk, and responsibility."

concerned themselves simply with loan interest, which is obviously only an outgrowth of natural interest or return on capital employed in production. This interest-profit is what needs explanation. The earlier economists explained the laws of rent and wages, and concluded that capital had what was left, which became thus a "residual product." Others have concluded that capital and land exacted returns according to fixed laws, and wages was the residual product. The truth seems to be that no one of the three is a residual product. A return is demanded by each according to fixed laws, and if there is not an assurance of such a return they will not join in production. The true residual product is the economic surplus which accrues to monopoly of any sort. What is the law of interest-profit? Among many answers two must be considered, on account of their importance, before the more recent and, to the present writer, on the whole, more satisfactory theory, namely, that of Dr. von Böhm-Bawerk, is presented.

Productivity.—It is often said that capital in production is productive, and so calls for interest. Obviously, capital is productive in the sense that production is greater with than without capital; but does this explain interest? Without considering many minor difficulties, such as the fact that capital draws less interest as it becomes more productive, we pass at once to the fundamental difficulty of this theory. Capital does not generally produce goods like itself. It produces goods eventually which satisfy human wants. We know why these ultimate goods have value—simply because they satisfy human wants. But what gives value to capital, which by very definition cannot satisfy human wants? For instance, why should any one care for a plow, which one cannot eat, wear, or play with? The reason is clear: because it produces things which we can eat, etc. Their value gives value to the plow. Thus we have the principle that *the value of capital is a reflected value*; that is, the value of the means of production is derived from the product. But how much value will the plow have? Sup-

pose it lasts ten years, and with it are produced crops worth one thousand dollars. Paying all the rent, wages, etc., fifty dollars is left at the end of the ten years. Now, men learn to foretell these results very closely, and from their estimate of what a machine will produce they determine its value. If it will produce a great deal they value it very highly; if only a little, they will give only a little for it, no matter how much or little it cost. So it does not do to say that capital draws interest because it produces more than its own value, for, as we have seen, *it is valued according to what it produces.*

Abstinence.—It is also said that interest is the wage of abstinence. As we have seen, capital is the result of a special production made possible by saving. Men cannot have capital if they consume all the goods they get hold of. It is said that men must be paid a certain amount to induce them to save, and that this is interest. This is true in a way, but it is perhaps not the best way to state the truth. Let us return to our illustration of the plow. We are convinced that it will bring us in at the end of ten years a clear surplus of goods worth fifty dollars. According to the law of reflected value it ought to be valued at fifty dollars, and we ought to be willing to forego fifty dollars' worth of satisfaction in order to secure it. But, as a matter of fact, we will not do so. Probably thirty dollars' worth of goods is all we will give for fifty dollars' worth of goods ten years hence. Now, to call the remaining twenty dollars a payment for abstinence is misleading; for, as a matter of fact, the abstinence involved is a very variable thing, and often there is none at all. Besides, we do not pay for abstinence but for results.

Böhm-Bawerk's Theory of Interest.—Why will not men give fifty dollars for fifty dollars ten years hence (all risk, etc., being covered by insurance)? Simply because desire, the source of value, is stronger for things near than for things far away. Human experience in a thousand lines proves this. The wants of men are like Esau's hunger. He would rather have (that is, he values higher) a mess of pottage *now* than a whole inheritance *in the future*. Distant enjoy-

ments are vague to men's minds, while near ones are vivid and tempting. Think of this as we will, it is a universal fact. Thus it is that a man will not give present goods for future goods in like amount, because *future goods are less valuable* than present goods. Fifty dollars now is worth perhaps fifty-three dollars a year hence, and eighty dollars ten years hence.

When we consider interest in its ethical aspects much more can be said than the limits of the present work will permit. It must not be supposed that an absolutely correct theoretical explanation of interest would have changed the attitude of Moses, Aristotle, Cicero, and the sages of the past with respect to it. They seem to have desired certain things with which the receipt of interest was calculated to interfere. One of them was mutual helpfulness. Loans were desired in the past preceding the era of capitalistic production chiefly to relieve distress, or possibly to purchase tools for an artisan. They were not then designed to increase the earnings of great *entrepreneurs* or captains of industry, as is now often the case. It appears also to have been the desire of many of these wise men of old that opportunities to gain a livelihood without personal exertion should be reduced to a minimum, and private receipt of interest undoubtedly makes it possible to enjoy an income without personal exertion. Ethically all that we have, as well as all that we are, must be used for the benefit of society as a whole, ourselves included; and all this introduces further considerations. There is on the part of some an effort to make a distinction between loans to relieve distress or to help the young to get a start in life, and loans to be used in productive enterprises like manufactories or railways, and to lend money without interest in cases of the first kind, but to take interest in cases of the second kind. This would seem to accord with the spirit of the teachings of the Bible and of the older philosophers.

The Rate of Interest.—There is a real and an apparent fluctuation in the rate of interest. The apparent fluctuation

is due to the inclusion of insurance with interest in a single rate. All are familiar with the fact that loans on good security can be had at a lower rate than others. This simply means that a man who takes some risks as to getting his money back adds to the interest a premium to cover this risk. Loans for long time are also cheaper because the lender runs less risk of having his money lie idle than if he makes frequent short loans, and saves himself the trouble of reinvestment. Aside from these changes a steady diminution of interest occurs in most civilized countries. This change, which is not due to lessened risk, marks a change in men's valuations of future goods. Present wants, being better satisfied, are less clamorous and contrast less vividly with remoter wants. Men gain confidence in the future and estimate its possibilities more justly, or at least more favorably. The lowering of the interest means that men are less needy in the present or more appreciative of the future, than before.

Pure Profits.—In contrast with the routine of systematized industry where all returns are paid out to landlord, laborer, and capitalist, and just suffice to secure their participation, we see concerns here and there which accumulate a surplus over and above the profits of their rivals in the same lines of business. They do business under the same conditions, make the same goods, and sell to the same public as the other firms; yet they have a surplus profit, while the others have none. Every one knows that such things happen. Thus, the so-called "merchant prince," A. T. Stewart, maintained a business which distanced all competitors and which could not be maintained after his death. Not unfrequently a business depends so entirely on exceptional abilities for its surplus profit that when these abilities disappear business relapses to its former level of ordinary returns. In other cases the improved management is continued until rival concerns learn the secret, competition lowers prices, and the surplus disappears in a cheapening of economic service to society. Thus the achievements of genius constantly tend to become an addition to social skill. But

until they have become so special abilities command a rent precisely as does special productivity in land. We may call this surplus of pure profit a brain rent as the other is a land rent. They are governed by the same law except that genius is not fixed in amount, like land. Added to these rent-producing powers of productivity and ability is a certain element of chance (conjuncture) which affects incalculably the result in particular cases, such as the accidental discovery of a mine or a process which equally enriches their lucky possessor; the outbreak of war and any combination of events fortunate for the individual fall under this head. Such elements can be enumerated and described only so far as the individual is concerned. They cannot be reduced to any assignable principle and interfere as disturbing elements with the operation of general principles. They are, however, of great importance in the distribution of wealth, making many rich and also impoverishing others. The broad social standpoint reduces chance to a minimum, for irregularities counterbalance each other when we consider great masses of facts or large areas. The poor wheat crop of one section is accompanied with an unusually large yield elsewhere, etc.

Monopoly Profits.—We have seen that under competition pure profits rest upon a precarious foundation. If the special abilities on which they rest are such as cannot be duplicated they perish with their single possessor; if they can be duplicated rival concerns are sure to duplicate them, and the special advantage is lost through competition. But there are advantages entirely equivalent to these which may become the exclusive property of a concern and make competition impossible. Such are the possession of those particular locations or privileges upon which a business depends, the right of way of a railway, the privilege of supplying a city with gas, electricity, water, transportation, etc. Under such circumstances competition is usually not possible, and never permanently successful. The business becomes a monopoly by its very nature if not by distinct legal privilege. The restrictive power of competition over price is removed,

and a surplus over rent, wages, and interest, and profit, in the true sense of the word, is now a regular result. Unless interfered with by legislation there would seem to be nothing to prevent a monopoly asking any price it pleases. It is a mistake, however, to suppose that a monopoly price has no economic limits; for increase of price tends to lessen consumption, and a point is soon reached where an increase of price is more than compensated by a decreased sale. This point is the natural limit of monopoly price, and gives us its law. *Monopoly price is that price which yields the greatest surplus.* This will vary very much with the article. Some will bear raising the price much more than others without serious decrease of sale. *The monopoly price will rise and the monopoly surplus increase as wealth and willingness to spend increase in the community.* It is thus that monopoly, without any effort on its own part, shares in the increasing wealth of the country and absorbs a large part of it. It is, for example, among other things, the larger wealth and greater willingness to spend freely which make monopoly more profitable in the United States than in Germany.

It is to be noted that while pure profit, apart from the gains due to a happy combination of affairs (conjuncture), is largely a surplus *produced* by genius, and is in so far no burden to the community which tends to profit by it eventually, monopoly profit is a surplus *extorted* by power and privilege, and invariably a loss to the community. Distribution of wealth comes increasingly under the influence of monopoly. The economic surplus yielded by monopoly is the source of many of the largest fortunes of our day, and is the prime cause of the growth of inequalities of fortune during the present century. *While in general competition increases in severity, an increasing proportion of the industrial field is withdrawn from competition and falls under the control of monopoly. There is thus a growing class enjoying special economic privileges.*

Monopolies will be further considered in Book III.

SUMMARY.

1. Capital is the third factor in production, a derivative element but wholly comparable in its action to natural elements when once produced.
2. The return to capital is usually known as interest or profit.
3. The total surplus left in the employer's hands after wages and rent are paid must include: 1.) Replacement of capital; 2.) Insurance against loss; 3.) Wages of superintendence; 4.) Interest on capital; 5.) Pure profit.
4. Interest has been explained as due to the productivity of capital—in oversight of the fact that capital derives its value from what it produces.
5. The explanation of interest as a payment for abstinence is inadequate.
6. Interest is the result of the fact that future goods, on account of their present inaccessibility, have a lower value than present goods.
7. The former condemnations of interest arose partly from a misconception of its nature, partly from a difference of conditions.
8. The rate of interest tends to fall as affluence and intelligence lessen the disparagement of future wants.
9. Pure profit is a rent, usually temporary, paid to managing ability.
10. Monopoly profit is a rent paid to advantages of opportunity, as location, privilege, etc., when exclusively controlled by individuals.

QUESTIONS.

1. What is the difference between capital and the other factors of production? Does this materially affect its operation?
2. What is usually included under "profits?" Define each. How many of these elements may be properly called profit or increase of wealth?
3. What is the productivity theory of interest? its error? the abstinence theory? its defects? the theory of Böhm-Bawerk? Does a man pay more *value* than he receives when he returns a loan with interest? Why?
4. What two changes are there in the rate of interest? the cause of each?
5. Why was interest once condemned? Is it always right to-day? Why?
6. What is pure profit? Why unstable? Does it become more stable?
7. What is monopoly profit? What are its limits? Has it any connection with pure profit? What is its character as regards social welfare?

LITERATURE.

Böhm-Bawerk, E. von: *Capital and Interest*, for a criticism of former interest theories is an ideal of logical and judicial criticism. *Positive Theory of Capital* by the same writer presents his own theory.

Walker, F. A.: *Political Economy*.

Mill, J. S.: *Principles of Political Economy*.

Clark, J. B.: *Philosophy of Wealth*.

All standard works on Political Economy treat these topics.

PART IV.

CONSUMPTION.

CHAPTER I.

INTRODUCTORY.

CONSUMPTION is the correlate of production. As we said, man creates no new matter ; he also destroys no matter. Matter constitutes things. By man's activity, and sometimes without it, things acquire the power to satisfy human wants and become goods. By man's activity, and sometimes without it, goods lose their power to satisfy wants and become things. To make things into goods with a view to satisfying wants is production ; to make goods into things by satisfying wants is consumption.

It is easy to distinguish production from the mere happenings due to human caprice on the one hand, and from the unaided workings of nature on the other ; neither of which can be called production. But it is necessary to use more care in defining consumption. The term is one of that unfortunate class which is used loosely in ordinary speech, and must be made exact for scientific purposes.

In the first place, consumption does not include the passage of goods back into things by the simple action of nature, such as the rotting of apples, the dying of timber, animals, etc. Such goods perish, but they are not consumed in the economic sense. A more difficult distinction is that between consumption and destruction, both of them the result of human activity. All difficulties are solved, however, if we keep in mind the simple fact that the satisfaction of

human wants is the purpose and the measure of all economic activities. Wood burned in a stove is consumed, because it satisfies wants ; burned in a conflagration, it is only destroyed. Moreover, a good may satisfy certain wants and still be destroyed, as when we warm a house by burning furniture. This satisfies wants, to be sure, but wants which are less than those which furniture may satisfy. If we break up a stove into old iron we still have a good, but one farther removed from the satisfaction of wants than the good from which it was made. All processes which destroy or diminish possible utilities are destruction, not consumption.

On the other hand, we must guard against an opposite error. We are apt to have certain personal notions of the desirability of certain wants, and to say that goods are destroyed or wasted when devoted to uses which we do not approve. Thus we say that corn used for food is consumed, while corn used for whisky is destroyed. Such a judgment may be morally right, but it is wrong economically. A want is a want, and in economics wants are measured only by their intensity as regards their economic validity. The very fact that whisky is made indicates that a certain number of "wants" can be better satisfied by corn whisky than by corn bread. It is undoubtedly better for a man to burn his furniture to warm his house than to sell it to buy drink, but economically the one is destruction and the other consumption. All of this merely means that man is more than a wealth-getting animal. Economic interests are not his only interests, nor always compatible with his other interests. The economist by no means claims that economic considerations should always be followed. He knows full well that economic wisdom may be human folly, and that life is continually neglected in order to get a living. Economics must, however, consider the reactions of wants and their satisfaction upon economic activities. We must also avoid the error of supposing that consumption means the rapid using up of things. We often think that some goods are consumed while others are only used. The distinction is one of degree only

All products are used up at last, and whether soon or late makes no essential difference for present purposes. Houses are consumed as truly as food. Consumption means nothing more than using things in the way they were economically intended to be used. The using up or wearing out is merely an inevitable incident of this use or consumption.

Productive and Final Consumption.—Having defined consumption, we have now to notice two kinds of consumption, or, more exactly, the consumption of two kinds of goods. These are capital and consumption goods, or goods designed to satisfy wants directly. Machines and raw materials are consumed as truly as finished articles. The difference is that they are consumed to produce, while the others are consumed to satisfy wants. Hence we call this productive consumption, while that consumption which attains the ultimate goal of economic activity in the satisfaction of wants is final consumption.

It is necessary again to guard against the idea that food consumed by laborers is productive consumption. All such questions are to be settled by the consumer himself, who has final rights in the matter. He consumed not for the sake of production, but for the sake of satisfaction, and produces only that he may consume. *Man is our final term.*

It goes without saying that only final consumption is of any real importance to life. This is the goal of our effort, the measure of our success. Heterogeneous estimates of unconsumed wealth mean little or nothing as to a nation's well-being. How much is the final consumption of the nation in a year? This is the important question in this connection.

Alleged Present Consumption of Future Products.—We often hear of consumption in advance of production. It is said people live on the future. It is frequently argued that during our late war we were consuming faster than we were producing. It is alleged that the federal bonds represented the consumption of future earnings. Those who talk thus appear to have no clear notions. It is impossible to consume faster than we produce unless we consume past

savings. We cannot eat to-day the wheat or potatoes of to-morrow, nor can we wear coats before they are made. What is alleged can only be true in case the capital or other wealth of the country is diminishing, whereas during our late civil war it increased. What really happened was this : We as a nation became indebted to some extent to foreigners, and within the nation some of us gained while the rest of us were losing. Bonds do not represent a present consumption of future wealth, but a consumption of existing wealth for which a government agrees to remunerate its owners in the future. If war can be carried on with the aid of bonds it can—leaving out of consideration what foreigners send us—with a sufficiently perfect taxing machinery, conceivably always and practically sometimes, be carried on without bonds. It is only a question of how to get hold of existing wealth. War was formerly carried on without bonds, because they are a comparatively recent contrivance. Consumption can never anticipate future production ; it can only anticipate future ownership.

SUMMARY.

1. Consumption is the correlate of production, the change of goods into things through the satisfaction of wants.
2. Consumption is to be distinguished from destruction which changes goods into things with a partial or complete failure to satisfy wants.
3. Consumption is not to be restricted to the satisfaction of morally justifiable wants.
4. Consumption is either productive or final, according as it results in the production of more goods or in the satisfaction of wants.
5. There is no such thing as present consumption of future goods, though future ownership may be anticipated in consumption.

QUESTIONS.

1. Define consumption. What is the difference between consumption and production? between consumption and destruction?
2. What is the difference between using things and using them up? Is the question involved in consumption, and if so, how?
3. What is the relation of consumption to the problem of good and bad wants?
4. Define production and final consumption.
5. What is meant by the present consumption of future goods?

LITERATURE.

Patten, S. N.: *Theory of Dynamic Economics; The Consumption of Wealth; Premises of Political Economy*, and numerous articles and monographs.

Roscher, Wilhelm: *Political Economy*. English translation. Book IV.

CHAPTER II

CONSUMPTION AND SAVING.

WHAT has been said in no way invalidates, but rather emphasizes, the importance of saving in connection with consumption. To be sure, we save only in order that we may have more to consume. Saving as a mere end in itself is penuriousness, a most degrading and demoralizing passion. But the efforts of man to produce goods are so inefficient unless he is aided by capital, which is impossible without previous saving, that he who does not save consumes his seed-corn, which is his hope of next year's harvest. It is difficult to say at what point consumption should stop and saving begin. The rule will vary for individuals and nations. Undoubtedly both persons and peoples have erred on either side at various times, now living in squalor to accumulate wealth, now spending their substance in riotous living until there is a famine in the land. There is not much to choose between these two vices. They both amount to the same thing in the long run, namely, a low average consumption and reprehensible poverty of life. Difficult as it is in practice to settle this question, the principle itself is very clear. *So much, and only so much, should be saved as will maintain a maximum final consumption over long periods of time.*

Inducements to Saving.—We have seen that men in general prefer a future good to a present one only when it is larger in amount. To provide for old age or for possible accidents may be a sufficient motive for saving in some cases, but most men will not save unless the goods saved will bring an increase. It is, therefore, necessary to an extensive saving that the conditions of profitable investment should be provided; and if wealth is to be widely diffused opportuni-

ties for investment must be readily accessible. It is a perceived opportunity to make an investment with probability of increase which stimulates saving above everything else. Such an opportunity is often the beginning of individual accumulation. Some of these conditions we have now to consider. They may be grouped under two heads, security and productiveness. If the investments of a country produce well on an average, but fluctuate between loss of principal on the one hand and unreasonable profit on the other, the condition is one to encourage speculation rather than saving. On the other hand, general security of investment will promote saving with a very low profit and of course increasingly as profit increases. Among the institutions to be considered are:

Private Property.—The abuse of the system of private property by those who use it selfishly and oppressively is so common that if we look only at that side we may be tempted to conclude that it should be abolished. But over against the abuse must be set the advantages of the system of which the foremost is the encouragement it gives to saving.

Stock Companies.—These are but an extension of the principle of division of labor. How much better it is for each man to do the thing he can do best and leave other functions to others is clear in connection with labor. Our experience has made it clear in connection with management as well. How few men know how or could ever learn how to manage a railway! On the other hand, there are multitudes who could contribute something toward building one. Stock companies combine those two powers, the power of saved-up wealth and the power of exceptional ability in management. Few institutions of our day offer greater possibilities in the way of encouraging saving than these companies. It must be said, however, that these possibilities have as yet been only imperfectly realized. These investments have in general been profitable, but by the speculative nature of their management the security of such investments has been almost destroyed. No severer indictment can be

brought against the stock gambling of our day than the fact that it has destroyed one of the most efficient incentives which society possesses for the general saving of wealth. Who would dare advise a poor widow to invest her savings in railway securities? Yet no property in the country is more evenly or certainly productive than many of our railways. The difficulty is due to a lax sentiment and lax legislation affecting all stock companies alike, which permits a kind of management little superior to piracy. Such robbery does not simply steal the golden egg; it kills the hen that lays it.

Savings Banks.—These have a noteworthy influence upon saving, especially among the poor. It is here especially that encouragement to saving is needed. The rich, who least need to save, are most apt to do so, not simply because they have most to save from, but because they have most inducement to do so. The poor, on the other hand, as we all know, and as we are over-fond of asserting, are poor in large part because they are thriftless. With weak wills and clamorous wants they know poorly how to keep money in the house unspent. So “flush” times bring reckless expenditure, and hard times bring distress. Savings banks, especially in Europe, have done much to promote thrift among the poor.

Insurance.—This relatively modern institution is already one of the most valuable factors in our economic civilization. It has the great merit of providing in varying proportions for both security and profit of investment. The provision for security is especially prominent in the case of fire insurance. It is often said that such an insurance is simply an equalization of losses, or a distribution of a heavy sudden loss over a long period of time. In fact, it is much more than that. It is important to take the amount of a loss from a business in such amounts and at such times that no vital want is left unsatisfied, and this is done by insurance. Thus perpetuity and equality of conditions is guaranteed to a business in such a way as to greatly encourage investment. The same principle applies to life insurance. The death of a

business man is often a more serious shock to a business than a conflagration. The payment of a life insurance policy is often a very great relief to the financial embarrassments in which such a business is left.

But the addition of the endowment feature by which a policy becomes payable at the end of a stated period greatly adds to the other feature of life insurance, namely, the profit of investment. An able business man who devotes his time to the management of his investments will find in the low rate of interest guaranteed a small inducement, and will probably insure simply to guard against risk. But there are multitudes who are not able business men—professional men and others who do not spend their time in making and managing investments. To such it is easy to save the amount of a year's premium. It is difficult or impossible to invest that small amount profitably or to avoid spending it during a long period of years. The insurance company collects these myriad trifles, and by the employment of able investors profitably invests them. We can scarcely overestimate the importance to society of an institution which equalizes the shocks and multiplies the incentives to thrift and wholesome economic activity.

Some idea of the magnitude of the insurance business may be obtained from the fact that there were in 1887 in the United States 532 life insurance companies with 5,383,050 policies in force, \$630,913,768 gross assets, and insuring lives to the amount of \$7,506,027,211, or nearly 13 times our interest-bearing national debt. This, it must be remembered, includes only a single branch of the complex insurance business.*

Coöperation.—Coöperation in all its forms is an incentive, not only to industry and good work, but also to saving. The principal difficulty with it is that it requires some saving before it can be started; but once in operation its incentives are increasingly felt and appreciated. Nothing is so necessary to the development of thrift as a flexible element in a

* Publications of the American Statistical Association. Vol. I, p. 146.

man's income varying with thrift. Perhaps coöperation better than any other agency makes a man feel the immediate results of saving. This is especially true when the necessary capital is in the form of stock which can be owned in large or small amounts, according to savings invested. Coöperative stores have been especially successful in England, and while coöperation has been found more difficult in productive industries, there are numerous examples of its successful application.

Governments and Capital Formation.—It is to be noticed that governments are more or less prominent in capital formation. When our federal government pays off the national debt it forms capital. The means to pay the debt are collected in small sums from millions of people who would not have used them for purposes of production, and then the aggregate is handed over to the owner of a written obligation, a bond, who uses them as capital. These means in the pockets of the people were not capital, and only a small proportion would have been turned into capital. There can be no doubt that debt payment by the United States has increased the actual capital of the country. A part of this new capital, it is true, simply restored capital that had once existed and had been sacrificed years before. Similarly, when the United States expends its revenues for post office and other federal buildings, and for wise internal improvements, it increases capital. It is a consumption which is at the same time a capital formation. When municipalities establish gas works, electric lighting works, and pay for them by taxes or by loans repaid by taxation, the capital of the country is increased. The people save a portion of their income through the agency of government, and it is the only way a large proportion of them can ever be made to save anything.

SUMMARY.

1. Saving should be so proportioned to final consumption as to maintain a maximum final consumption over long periods of time.
2. The inducements to saving are primarily security and productiveness of property.
3. Stock companies combine managing ability and saving ability, which are not naturally united to a large extent.
4. This system has offered the inducement of productiveness, but has destroyed that of security through speculative management.
5. Savings banks greatly increase saving among the poor.
6. Insurance offers both inducements in a high degree and is the great modern capital creator.
7. Coöperation is highly productive of incentives to saving.
8. Through taxation and wise investment government contributes largely to the formation of capital.

QUESTIONS.

1. Is saving always a virtue? If not, what are its limits? What is the difference between saving and penuriousness?
2. What two inducements are necessary to saving?
3. What are the advantages of stock companies? their disadvantages? Are the disadvantages inherent?
4. What are the advantages and disadvantages of private property as regards saving? (Note both sides.)
5. What is the effect of savings banks upon saving?
6. Why does insurance promote saving? What is the advantage of equalizing losses? Is life insurance a good investment, and why?
7. What is the effect of coöperation and capital sharing upon saving?
8. Are we always "out of pocket" as a result of government expenditure? Why?

LITERATURE.

See works already cited.

CHAPTER III.

LUXURY.

LUXURY is the name of a vague something which society has always viewed with a sense of mingled tolerance and condemnation. We must know what is signified by the term before we know what to think about it. Many and various definitions have been offered not wholly satisfactory. Without decrying these definitions we will try to get at the popular conception underlying the word. In the first place, it is clear that people ordinarily consider as luxuries many things in themselves innocent and desirable, silk dresses, jewels, pictures, etc. No one but an ascetic will condemn as wrong in themselves things that appeal to taste and the finer appreciations, and yet we feel that the use of such things is often unjustifiable. Second, the popular idea of luxury recognizes a difference in persons. We cannot help condemning in one person what we approve in another. Third, we judge luxury differently at different times. There is a continual transfer of articles from the list of luxuries into that of comforts and necessities. This transfer is brought about by the consensus of social judgment, and is increasingly acquiesced in by all. So we see that the term luxury does not apply to goods of a certain character, but to certain goods in their relation to time and person. We may define luxury simply as *excessive consumption*. But what determines whether consumption is excessive or not? The answer to this question is connected with the problem of the distribution of wealth.

Two facts are prominent. First, the distribution of wealth is enormously unequal. This needs neither proof nor elaboration. Second, the ability of men to use wealth profitably is enormously unequal also. There is not the remotest proba-

bility that the latter inequality can ever be removed. Men must ever differ, not only in the nature of their wants and appreciations, but also in their aggregate amount. Should wealth be equally distributed? Remembering that ownership means simply control over goods, let us put this question in a simpler form. Should the wealth of a family be owned or controlled in equal shares by its different members? Before we hastily answer yes let us ask what this would mean. Can the two-year-old control his part of the family fortune as well as his father? Can he appreciate or profitably use rare books, pictures, and fine furniture, to say nothing of capital, to anything like his numerical proportion? Plainly not. How much may he claim? First, he may claim *as full a satisfaction of his wants as is accorded to the rest*; second, he may claim *as good an opportunity to develop his wants as is accorded to the rest*. So much he may indubitably claim by the law of the solidarity of the family, which is the epitome and type of the solidarity of society—a law which lies far deeper and broader than all other laws, at the very bottom and foundation of things.

Returning to our larger problem, we ask, How much may a man consume? As much as he can lay hold of? We must again remind the reader that this is the law among swine. As much as every other man? The result would be an immediate and disastrous impoverishment of society. How much, then? The only justifiable law is that already enunciated for the family. He may consume in proportion to his power to appreciate and utilize. To consume more is to limit correspondingly the right of some other man. There is no possible reason why goods should be distributed alike to every man. To do so would be to use goods where they satisfied trifling wants or none at all—a use which, as we have said, is not consumption, but destruction.

But, while such a form of injustice has never been perpetrated, an opposite form is exceedingly common. *An* inequality of consumption is demanded on the basis of simple justice, but not *the* inequality which exists. To consume dis-

proportionately to one's wants or one's likelihood of development is to destroy or to consume with relatively small returns, and is a wrong to society. The *excessive consumption* which constitutes luxury is therefore a consumption in excess of man's fundamental claims, which are in general, *first, the right to as full a satisfaction of wants as can be accorded to all; second, the right to as free a development of his wants as can be enjoyed by all.*

Greater inequalities are admitted than would seem to be the case on first thought. The wants of a king are very great, and these wants are true, legitimate wants, upon the satisfaction of which depends the welfare of society. The wants of those engaged in the learned professions are greater than are ordinarily understood. The higher scholarly, literary, or artistic work often involves large expenditures. Travel is important for those doing this kind of work, and books are indispensable. What is often thought of as luxurious expenditure is simply an outlay which is an indispensable part of the price society pays for the product. Professors in American universities, for example, frequently are not able to satisfy their wants sufficiently to give society work of the highest sort of which they are capable.

The rule given is one which looks at consumption largely from the standpoint of individual enjoyment as the result of consumption. When we view the consumption of the individual as a condition of social service a certain modification may be necessary, especially if the entire social product is not great enough to allow all to develop their faculties completely. It is unquestionably in the interest of society that those with the highest capacities should be allowed to attain the fullest development of all their powers, provided these powers are used in the service of humanity. A disproportionately large consumption of the individual may be praiseworthy, provided this consumption is for the real development of powers designed to be used "for the glory of God and the good of man."

While then justifiable consumption will, according to these

principles, be exceedingly variable, can anyone for a moment claim that such principles now govern social consumption? Immense sums are squandered on passing caprices which do not correspond to any really felt want. On the other hand, multitudes of fine natures with keen appreciations and large capacities for development and present enjoyment are left without the means for either. So long as these things exist, so long as a vast amount of the world's wealth is destroyed by vulgar and incompetent consumption which might impart satisfactions of a high order if consumed otherwise, and by others, the moral sense of the world will condemn luxury as a social wrong.

And what is the excuse for this abuse? Usually the simple fact of ownership. "It is ours," they say. But for what? Simply because the interests of *production* require capital to be massed under specialized control. The few who are able to manage capital must be allowed to manage it; and management means control. But the many who have wants must have those wants satisfied, and that satisfaction means the right of consumption, a right proportioned to those wants. There is no more reason why a millionaire should consume all the wealth he controls than there is why a philosopher or an artist should withhold from society the satisfactions afforded by his genius. A successful manufacturer once expressed the opinion that a man had a right to put down silk velvet on a muddy crossing to walk on if he were rich enough to afford it. When a man tramples in the mire the fruit of human industry he tramples with it human rights and humanity, and should expect humanity to avenge the affront. It needs no prophet to foresee that men must learn to own their property for the good of society, or society will own it for them. The right of private property, like other social institutions, is ever on trial. The obsolete objection is still sometimes urged that luxury gives employment to labor. Does not philanthropic and productive expenditure do the same? But that is not the question. What comes of the employment? The payment of wages only

helps men to get more of existing goods—at the expense of others among whom the goods are divided. It may help workmen to get goods away from others, to give them employment ; but the only way to help society is to give workmen *useful* employment, to aid and encourage them to *produce needful goods*. Every employment of labor which encourages the production of luxuries is a misdirection of social energy, an encouragement to society to spend its money for that which is not bread and its labor for that which satisfieth not. Excessive consumption is necessarily wasteful consumption, and as such is necessarily reprehensible. There can be no kind of doubt as to the teaching of Christianity on this subject.

SUMMARY.

1. Luxury is a vague conception, differently applied according to time and person. It is the excessive consumption of wealth.
2. Consumption should be proportioned wants and capacity for development. Consumption beyond this is excessive and unjustifiable.
3. Equal distribution of wealth would result in a most unwise consumption of goods.
4. Ownership and the necessary centralization of capitalistic control are no measure of the right to consume.
5. Luxury cannot enrich a community by giving employment to labor because it misdirects productivity.

QUESTIONS.

1. What is luxury? What is the popular idea? How does it vary?
2. What may each man justly claim as a consumer? Why may he not justly consume all he can get? May he justly consume all he can produce? Why?
3. What would be the result of an equal distribution of wealth? Why?
4. What objection can be raised to our present distribution of wealth? Why?
5. Should capital and consumption goods be distributed according to the same rules? Why?

LITERATURE.

Ely, R. T.: *Social Aspects of Christianity.*

CHAPTER IV.

HARMFUL CONSUMPTION.

WE have been careful to avoid the impression that luxury consists in the use of pernicious goods. It is a common query, "Why should I not have this if it does me no harm?" This we have tried to answer in the previous chapter. It amounts to the same thing as harm if an innocent but insignificant satisfaction prevents the accomplishment of a greater good. A luxury may be a positive good in itself, a satisfaction which society may well hope to make general, but it is a good which society cannot yet afford because other and greater wants are yet unsatisfied. It is a satisfaction permitted ahead of its time.

But we have to consider a kind of consumption which is objectionable in an entirely different way, not because it is excessive or premature, but because it is intrinsically harmful. It would be a violation of all language to call the use of intoxicating liquors a luxury in general, but it is certainly on the whole harmful. As we have said before, these wants are as really economic as any other, and we have no intention of assuming the function of the physiologist or the moralist in enumerating the evils which come from the consumption of certain goods. But in one respect we have a distinct part in this discussion. All production is for the sake of man, and consumption is its final term. But in turn man is the principal factor in production, and as the consumption of certain goods affects him the result is necessarily transmitted to the productive process. We have anticipated this principle in speaking of the influence of the standard of life on the efficiency of labor. Now, experience clearly demonstrates that the consumption of certain goods unfits men for efficient production. This is, therefore, an economically harmful con-

sumption. Whatever may be said for this consumption from other standpoints, the economist must deprecate it. All such consumption as lessens bodily vigor, blunts the perception, and in any way detracts from the delicacy of the human organism is of this sort. Of course, no complete enumeration is possible, but certain cases readily suggest themselves. The magnitude of this harmful consumption, however, is enormous.

First in the list, of course, comes intoxicating beverages, especially distilled liquors. According to government reports there were consumed in the United States in the year ending June 30, 1890, of distilled spirits 87,829,562 gallons; of wines 28,956,981 gallons, and of malt liquors 855,792,335 gallons, a total of 972,578,878 gallons. This was an average of 15.53 gallons for every man, woman, and child in the country. The increase in amount is not less striking. In 1875 the amount per inhabitant was only 6.86 gallons. Since 1886 the amount per inhabitant has increased almost exactly one gallon per year. The number of men engaged in the business of manufacturing these liquors, not including, of course, those who produce the raw materials, is stated by the same report to be 900,808.

Of course we cannot tell just how much was paid by the consumers for this immense flood of intoxicants, which, if poured together, would fill a channel twenty feet in depth, twenty feet in width, and fifty-four and one half miles long; but many estimates have been made both by those who defend and those who oppose the use of alcoholic liquors. They place the cost at from \$700,000,000 to \$1,000,000,000. If we deduct that part used in the arts, and for other purposes besides that of drinking, it is probable that the first estimate, namely, \$700,000,000, is not too high a figure to represent the amount of money that is yearly paid for intoxicants which are used as beverages. This is equal to an expenditure of about \$11 for every man, woman, and child in our country.

In comparing the amounts expended for these liquors with what our people expend for other purposes there have been

many misleading estimates made which in the long run can be of no real service to the cause of temperance. For instance, some persons in comparing the cost of drinks with the cost of all the food consumed in the United States have placed the former at the not extravagant amount of about \$900,000,000, but the cost of food they find to be only \$968,000,000. At this estimate the cost of liquors would be \$15 per capita, while the cost of food would be only \$16 for every man, woman, and child in the United States. There is an important difference overlooked, namely, that nearly all of the liquor consumed comes on the market and is there estimated in dollars and cents, while perhaps less than one fourth the food consumed is brought under the conditions necessary for a money valuation.

It is important to note that if the \$700,000,000 now spent for grain in the form of liquors were expended for food and other farm products to satisfy the rational wants of the thousands of families who are rendered destitute by intemperance it would purchase at least seven times as much grain in the form of flour as it does in that of liquor ; because it is true with regard to liquors, as with all luxuries, that the amount of raw material used in their production is far less, compared with their cost to the consumers, than it is in any of the other products that satisfy human wants. Thus we can see that those farmers who think that the liquor industry creates a demand for their commodities, and those brewers and distillers who endeavor to instill this belief, are both deceived and deceivers. How much better it would be if farmers could secure high prices for their grain and other products by ministering to those rational and higher wants which strengthen human nature and enable the consumers to produce in turn a greater abundance of wealth, rather than by satisfying the demands of base appetites that degrade men and lessen the community's wealth-producing power ! It is, of course, obvious that if men spend less for liquors, tobacco, opium, and the like, they will have so much more to spend for other things, and the opportunities for

employment will not be at all lessened. On the contrary, as other expenditures are more likely to be productive, opportunities for employment will inevitably be multiplied.

The indirect cost of intoxicating beverages to the community at large is far more tremendous and impossible of estimation than the direct cost. We all have to pay for the support of the armies of policemen, detectives, lawyers, judges, whose chief occupation grows from the use of intoxicants ; for prisons, penitentiaries, insane asylums, almshouses, fifty to eighty per cent of whose occupants are the victims, direct or indirect, of intemperance ; while all share in the loss of industrial power that comes from weakened constitutions, dizzy heads, and extravagance. Many books and articles have been written and many public speeches have been made upon these manifold and visible evils. Those who suffer the most from drink are the working classes, and they are also those who cannot conceal their excesses and misfortunes. But it is a mistake to suppose that workingmen alone furnish the drunkards, or that there are not great numbers of earnest temperance men among them. The rich have their social clubs where intoxicants perform their work as heinously as they do in the gutters, but less publicly. Almost the only social men's clubs in the United States without a bar attached are, so far as the writer has observed, workingmen's clubs. These appear to be generally devoid of that institution. There are few fashionable club houses in the United States where intoxicating beverages are not sold. While intemperance is a monstrous evil, and cannot be too earnestly fought against, we should not fail to see that it is at the same time both an effect and a cause. When we look for the worst effects of intemperance we go to our crowded cities and great industrial centers. But here we find industrial and social conditions which force us to believe that, until they are remedied, we can look for no lasting growth of temperance or strengthening of character: on the one side, immense wealth, with its temptations of pride and luxury ; on the other, crowded tenements, hot and noxious in summer, always loathsome and

repulsive, occupied by those who do not know whether they will find work that day or not. Their condition is often the effect of their former intemperate habits, and in turn it drives them and their children into further depths of inebriety. An important reason for the craving for intoxicants, as is shown by one of the foremost of American physiologists, is the lack of sufficient food or of a sufficient variety of wholesome food, and especially poorly cooked food. These and many other facts with regard to the economic conditions of our day admonish us that the thoughtful temperance advocate must embrace in his efforts both temperance and industrial reforms.

Another serious waste of wealth results from the use of tobacco. In 1886 there were 743,460 acres of land devoted to the production of this weed, and the quantity of cigars, cigarettes, and cheroots consumed by the American people in the year 1880 reached the enormous number of 2,821,776,282. In the year 1892 (fiscal year ending June 30) there were put upon the market for consumption 4,601,525,650 cigars and cheroots, and 2,896,407,763 cigarettes, a total of 7,497,933,413. The tobacco that was consumed by chewing and in the form of snuff was, in 1880, 136,275,835 pounds, and in 1892 the amount put on the market in the United States was 265,522,329 pounds. The indirect loss resulting from the use of tobacco is not so great, nor are its effects upon the consumers so disastrous as is the case in the consumption of intoxicating drinks, but it is at least doubtful whether the enormous outlay shown by the above figures is compensated by any increased happiness of the people.

The opium habit is said to be rapidly growing in America. Its effects are even worse than those of alcoholic intemperance, destroying both the mind and body and transforming its victims from productive members of the community into a public burden.

There are other objects of foolish and harmful consumption which will suggest themselves to any thoughtful person.

SUMMARY.

1. Harmful consumption is that which demoralizes the consumer and lessens his economic efficiency.
2. The principal harmful consumption is that of intoxicating beverages and tobacco.
3. The *per capita* consumption of each is increasing in the United States.
4. In comparing this consumption with that of food it must be remembered that a large part of the latter does not come on to the market.
5. The indirect cost to the community is greater than the direct cost.

QUESTIONS.

1. Is luxury harmful consumption? Why?
2. Is all harmful consumption luxury? Why?
3. What is the ultimate destiny of the two?
4. What is the amount of intoxicants sold in the United States? Of tobacco? The value of each?
5. How does it compare with food consumed? What is the difficulty of comparison?
6. What is the indirect cost of this pernicious consumption?

LITERATURE.

- Mitchell, Kate, M.D.: *The Drink Question*.
- Richardson, B. W., M.D.: *Ten Lectures on Alcohol*.
- Kerr, Norman, M.D.: *Inebriety, its Etiology, Pathology, Treatment, and Jurisprudence*.
- Clum, Franklin D., M.D.: *Inebriety, its Causes, its Results, its Remedy*.
- Cyclopedia of Temperance and Prohibition*.
- The Voice*, of New York. An organ of prohibition.
- The Union Signal*, of Chicago. The organ of the National Women's Christian Temperance Union.

CHAPTER V.

CRISES AND ANALYSIS OF CONSUMPTION.

Crises.—Crises are attended with a glut in the market, and it is said that they are caused by overproduction. A French economist, M. Jean-Baptiste Say, however, has developed what is called a *theory of the market*, which has quite generally been accepted by economists. It is that there is no such thing as overproduction, and never can be until all wants are satisfied. He says that the remedy for apparent overproduction is more production. Men bring commodities to the market. What do they desire? Not money, says Say, but commodities, money being a mere medium of exchange. Now we have already seen that a consumer is a producer. If there is a deficiency of consumers it must be because those who would like to consume have not produced economic goods for exchange. Overproduction, so called, is really underproduction, according to this theory. There is a large measure of truth in this theory. When are we most troubled with a glut in the market? Undoubtedly when least is produced. When is there the most ready sale for commodities? Undoubtedly when everybody is at work, or when most is being produced.

There is, however, another side to the question. It is quite possible to produce a larger quantity of some commodities, as potatoes, cotton, cloth, etc., than people need. More railways are often produced than the people need at the time. The effect of disproportionate production is that some commodities cannot be exchanged. Those who have produced them do not make their normal purchases. There is a falling off in sales of some other commodities, and among those engaged in producing these other wares some

cease to produce. Demand again falls off, and still others cease to work, as already explained. There is disproportionate production and overproduction of some things, and finally general overproduction, owing to underconsumption, due in turn to lack of purchasing power.

The intervention of money is an important factor. Undoubtedly commodities are in the end exchanged for commodities, but the intervention of a medium of exchange produces weighty consequences. Commodities are in the first instance exchanged for money, and all liabilities must be met in money. Houses, lands, etc., can only indirectly pay debts, and at times cannot rescue one from bankruptcy. Changes in money supply, especially a contraction of the volume of money, will render it impossible for producers to meet their engagements; production will begin to diminish, demand will begin to decrease, and the result is apparent general overproduction.

Remedies for overproduction or underconsumption, whichever one may choose to call it, are many. Whatever improves industrial society in any respect is a partial remedy. It is especially desirable, however, to bring producer and consumer as near together as possible, because it often happens that mutually desired products cannot, as a matter of fact, be exchanged. Obstructions to trade should be reduced to a minimum where they cannot altogether be removed.

Analysis of Consumption.—An analysis of the consumption of individuals, families, and societies is most instructive. An analysis of the expenditures of a family is called a family budget. Dr. Ernst Engel, the former distinguished head of the Prussian Statistical Bureau, has advanced the theory that it might be possible by a careful study of a sufficient number of family budgets for a period of years to construct a sort of *social signal service*. His idea is that changes in total expenditure and in expenditures for various items in a sufficient number of typical families could enable us to predict the coming of industrial storms.

The theory has not, so far as the writer is aware, ever been fully worked out, but the thought is suggestive.

The following tables, copied from the Report of the Massachusetts Bureau of Statistics of Labor for 1885, are worthy of careful examination :

ENGEL'S LAW.—PRUSSIA.

ITEMS OF EXPENDITURE.	PERCENTAGE OF THE EXPENDITURE OF THE FAMILY OF		
	A workman with an income of from \$225 to \$300 a year.	A man of the Intermediate Class ("Mittelstandes") with an income of from \$450 to \$600 a year.	A person in easy circumstances ("des Wohlstandes") with an income of from \$750 to \$1,100 a year.
	Per cent.	Per cent.	Per cent.
1. Subsistence.....	62.0	55.0	50.0
2. Clothing.....	16.0	18.0	18.0
3. Lodging.....	12.0	12.0	12.0
4. Firing and Lighting.....	5.0	5.0	5.0
5. Education, Public Worship, etc..	2.0	3.5	5.5
6. Legal Protection.....	1.0	2.0	3.0
7. Care of Health.....	1.0	2.0	3.0
8. Comfort, mental and bodily recreation.....	1.0	2.5	3.5
Total	100.0	100.0	100.0

"The foregoing table demonstrates the points upon the strength of which Dr. Engel propounds an economic law.

"The distinct propositions are:

"First. That the greater the income the smaller the relative percentage of outlay for subsistence.

"Second. That the percentage of outlay for clothing is approximately the same, whatever the income.

"Third. That the percentage of the outlay for lodging or rent, and for fuel and light, is invariably the same, whatever the income.

* In the original table this item was 1.5. The present chief of the Bureau, Hon. Horace G. Wadlin, kindly writes to the author that in his opinion it should be as given above, which makes the total correct, and this preserves "the regular progression of item 8 in the three columns."

“Fourth. That as the income increases in amount the percentage of outlay for sundries becomes greater.”

MASSACHUSETTS.—PERCENTAGES OF EXPENDITURES.—AMOUNT, \$754.42.

ITEMS OF EXPENDITURE.	Mass. Budgets, 1888.	Engel's Prussian Law.	Mass. Bureau Table, 1875.	Average.
Subsistence	49.28	50.00	56.00	51.76
Clothing.....	15.95	18.00	15.00	16.32
Rent.....	19.74	12.00	17.00	16.25
Fuel.....	4.30	5.00	6.00	5.10
Sundry expenses....	10.73	15.00	6.00	10.57
Totals.....	100.00	100.00	100.00	100.00

COMPARATIVE PERCENTAGES OF EXPENDITURES BY THE FAMILIES OF WORKINGMEN IN ILLINOIS, MASSACHUSETTS, GREAT BRITAIN, AND PRUSSIA.

ITEMS OF EXPENDITURE.	Illinois.	Massachu- setts.	Great Britain.	Prussia.*	Average.
Subsistence...	41.38	49.28	51.36	55.00	49.25
Clothing.....	21.00	15.95	18.12	18.00	18.27
Rent.....	17.42	19.74	13.48	12.00	15.66
Fuel.....	5.63	4.30	3.50	5.00	4.61
Sundries.....	14.57	10.73	13.54	10.00	12.21
Totals....	100.00	100.00	100.00	100.00	100.00

These tables will help us to understand the social troubles of our time. They show that the amount which workingmen have for all the higher wants and for health and recreation is still extremely small. Civilization develops the higher wants, but the improvements of the distributive processes of industrial society have not kept pace with the developemnt of these wants.

* It is to be noted that for Prussia a family of the intermediate class is taken.

SUMMARY.

1. Crises are periods of arrested industry attended by gluts and apparent overproduction.
2. Overproduction means really uneven production resulting in impeded exchange.
3. The remedy is to remove the obstacles to trade.

ENGEL'S LAW (FOR PRUSSIA).

4. The greater the income the smaller the relative percentage of outlay for subsistence.
5. The percentage of outlay for clothing is approximately the same, whatever the income.
6. The percentage of outlay for lodging and rent, fuel and light, is invariably the same, whatever the income.
7. As the income increases in amount the percentage of outlay for sundries becomes greater.

QUESTIONS.

1. What is a crisis? A glut? What is the popular explanation of the latter?
2. What facts are opposed to this explanation? What kind of overproduction is possible? Why?
3. What is the remedy for a crisis?
4. What is meant by Dr. Engel's theory of a social signal service?
5. What are his four laws? Do they apply universally?
6. Compare in detail the expenditures of Prussian and American families as given in the tables.

LITERATURE.

Say, J. B.: *Political Economy*, American edition, Book I, Chapter XV, "On the Demand or Market for Commodities."

BOOK III.

PUBLIC ECONOMICS.

PART I

PUBLIC INDUSTRY AND THE RELATION OF THE STATE TO PRIVATE ENTERPRISE.

CHAPTER I

INTRODUCTORY.

WE said in the opening of Book II that the difference between public and private economics was not wholly a difference between enterprises, but very largely a difference between parts of the same enterprise. There is no such thing as a purely private enterprise, and we may perhaps say, also, that there is no such thing as a purely public enterprise. Certainly in the vast majority of the enterprises with which we are familiar private and public activities are combined in varying proportions. Let us take the case of an industry which is as nearly private, perhaps, as any we can find—that of agriculture—and notice the part which public activities play in securing the farmer's result. First, we say that the farmer owns his own farm ; this is private property. But how comes it that the farm is his ? Why does not a stronger man drive him off and take the farm himself ? Plainly because the State, which is the organ of public activity, protects him in the possession of his farm. When he bought the farm he took his bill of sale or deed to a government official, who recorded it and thus gave him an official guarantee of possession. A neighbor's dog kills his sheep, and an appeal to the State compels the neighbor to redress the grievance. Another, far below, dams a river and backs the water up so that it overflows his land. Another appeal to the State removes the dam or secures damages.

When wheat is raised the farmer hauls it to market; but how is this made possible? By a road built, not by private but by public activity. The railway lowers the price of his wheat by a discriminating rate, and again government interferes in his behalf.

So much for the protections of government, the list of which could be greatly extended. But there are exactions as well which profoundly affect the farmer's economic activity. He has mortgaged his farm and does not pay. The sheriff appears and sells it to another man. Taxes are levied, and again if he does not pay his property is sold and the amount of the tax appropriated by government. An infectious disease breaks out among his cattle, and in spite of his protest they are slaughtered under public authority, and he is paid, not his own but an appraiser's price. A railway is built across his farm and, unwilling though he be, his land is taken and an appraiser fixes the price. This list, too, might be greatly extended, but enough has been said to show that in a highly organized State public activities are inextricably interwoven with private activities, and that any such thing as independent and unlimited private control is out of the question. The industry of agriculture, which we have seen to be so largely dependent on government for its benefits, and responsible to it for its obligations, is after all one of the most thoroughly private industries in existence. The farmer is free to make any bargain he pleases with his laborers, the manufacturer often is not. He can build as he pleases; the dweller in the city cannot. If he hauls a neighbor's wheat, he can charge what he pleases, the railway cannot; and so on indefinitely.

Thus we see that all enterprises are the result in part of public activity, and also that the part played by this public activity is different in different industries. We may lay it down as a general principle that, *as society becomes dependent upon the individuals in control of an industry, it protects itself by State activity.* The different forms of State activity will be examined later.

It is important for us to conceive clearly at the outset the exact subject of our inquiry. We are not concerned merely with State revenues or with the few industries which the State has taken entirely under its control, but with the *partial* control which the State exercises over all industries. Considered thus, public economics covers all the ground which we have examined under private economics. It concerns rent, wages, interest, etc., because it has a part in determining all these things. It affects profoundly all the fundamental economic processes of production, exchange, distribution, and consumption, which we studied under private economics. We study the same facts as before, but we study a different set of causes.

The State.—Without going into the question of what constitutes a State it will answer our purpose here to notice the extent of the conception as we use it. We in the United States are familiar with many kinds of government. When we speak of “the government,” we generally mean the federal government, with its seat at Washington. Then comes the State government, then the city, the county, the township, and the school district. Each of these has its own governing to do, and is backed up in the doing of it by all the governments superior to it. Now, it is entirely an accident with us that out of these half dozen forms of government only one, and that not the highest, is known as the State. In nearly every other country the governmental divisions most nearly corresponding to our States are known by some other name—departments, provinces, etc. When we use the term in the present work we never mean a State in our American sense unless that meaning is specified, but *any society acting through government*. Local governments are, of course, only branches of the main government. So, when a school district hires a school-teacher, or a township mends a road, or a city builds water works, or a “State” builds a penitentiary, or the federal government builds a post office, all these are State activities in the scientific sense of the word. So, too, when we speak of State intervention

we may be talking about the township or the city or the general government. These are only different ways of exercising one and the same kind of power—that of organized government.

The Nature of State or Public Activity.—The laws which we have considered under private economics operate for the most part unconsciously. A law regulates with force the wages of workmen, but neither workmen nor employer in general know why wages are as they are. Men lend money or goods, now for one price, now for another, but few know why they demand interest or why the rate changes. These processes go on visibly before us, but the governing laws are hidden except to the careful investigator. In this respect they are like the laws of physiology. We all eat and digest our food, but how many people know how or why digestion takes place? The laws of this private social economic activity are largely of this sort, spontaneous and unconscious.

The laws of public activity are, on the contrary, conscious and volitional. When we decide to make a law or levy a tax we do it consciously, considering arguments, and finally will the thing in question. Individual citizens may not realize what is going on, but the men composing the government know what they are doing and why they are doing it. Some people are inclined to call those spontaneous and unconscious forces which we have compared to digestion *natural*, as contrasted with these efforts to modify results consciously, which they would call *artificial* or even *unnatural*. One objection to this is that unobserved it prejudices all our conclusions. It is of the utmost importance that we should understand what is natural to man.

We are all aware that nature and natural are variable terms. Is it natural for animals to swim? That depends on the animal; for beavers, yes; for cats, no. Is it natural for beings to be governed by unconscious laws or instincts? That depends on the being; for cattle, yes; for men, no. Is it natural for men to divide goods on the basis

of selfishness, or "grab what you can?" For some men, yes, but not for all; in some stages of development, yes, but not in all. Plainly, that is natural in human conduct which is in accordance with the nature of man. What kind of a nature has man? We can answer at least in part. Is man a selfish animal? Certainly. Is he a social animal? Undoubtedly. Is he a thinking animal? Unquestionably. Is he a moral animal? Beyond a doubt. Few will question that all these elements are contained in human nature and that their diversity explains the perpetual warfare in the individual life. If selfishness is necessary to the beginning of life it is inadequate to its completion. Selfishness never makes a man. We must add the social nature, teaching men to act *in concert*; the intellectual nature, teaching them to act *consciously*; the moral nature, teaching them to act *rightly*. When a man defends his greed on the ground that it is "human nature" all he means is that it is his nature, that greed is natural to those who have not developed beyond the barbarian stage. Concert, consciousness, and conscience are as natural to the ultimate man as greed is to the primitive man. It was the mistake of Rousseau and his school to confound the *primitive* with the *natural*. They said, "Back to nature." They should have said, "Forward to nature." We have noted a tendency to increase public activities as civilization develops. This may now be stated in another way. *As men come into closer and more vital contact with each other their activities tend to become social, conscious, and ethical.* By no means all of this tendency culminates in governmental action, but much of it does so, and whatever we may conclude as to the wisdom of such action we must not beg the question by calling it unnatural.

We have dwelt thus at length upon this point because while no one urges that the long-established activities of government are unnatural or artificial every proposal to extend these activities is tacitly or openly opposed on these grounds. It is generally objected to a law limiting the hours of labor that it is unnatural, as if a free scramble were

the natural condition of society. Whether such a law be wise or not we shall consider later; but one thing is certain, it is *not* unnatural. If the social and ethical elements in human nature are to dominate more and more the isolating instinct of selfishness, we must certainly expect as a *natural* result more associated action, more thoughtful action, more action for the common welfare.

The State as an Instrument of Associated Activity.—It must be remembered that associated activity, far from being confined to government, is rather the rule than the exception in private enterprise. We have now corporations for railways, for commerce, for manufacture, for education, for evangelization, for charity, for almost every undertaking known to modern life. As these corporations increase in permanency, magnitude, and power to accomplish their purpose they approach increasingly to the character of independent governments. The question to-day is not between individual action and associated action, but between different kinds of associated action; that of the corporation and that of the State. Without anticipating here a discussion which must receive our careful attention later, we may notice briefly certain characteristics of the State which distinguish it from private corporations.

1. *The scope of State action* is necessarily great. A private society may in some respects do better charity work than the State, but nothing in its nature guarantees that it will cover the whole field. That which is undertaken by the State must usually be undertaken comprehensively and apply equally to all parts of its territory.

2. *The power of the State* far exceeds that of any corporation acting under its authority. Great corporations sometimes seem omnipotent, and they exercise an enormous and pernicious influence over legislation itself, but they can by no means command the resources and power of the State under which they operate.

3. *The State acts for all citizens*, while corporations in general act for a few and not unfrequently sacrifice the

interests of the rest. It must be remembered, however, in limitation of this statement that the disinterestedness and impartiality of State action is by no means what it should be. There is a constant tendency on the part of the governing class to manage government in the spirit of private enterprise, for their own sake and the sake of personal favorites. Under despotic government the "divine right of kings," which, properly interpreted, conveyed a correct idea, sometimes degenerated into the "divine right" of private ownership on the part of the monarch. Louis XIV of France, who better than any other monarch of recent times represented this despotic principle, said on an important occasion, "I am the State;" and he carried out his theory. Government under such a theory is an entirely untrustworthy instrument of social action. Unfortunately, however, under such circumstances private enterprise is apt to be equally corrupt. Its only advantage is that it is usually much less powerful for mischief. This private ownership idea is now thoroughly discredited in theory, though the spoils system in American politics shows its tenacious survival in practice. Its presence unquestionably greatly reduces confidence in the State and efficiency in State activity. Few will doubt, however, that public enterprise is conducted far more with a view to the welfare of all than private enterprise which is confessedly managed in the interest of a few.

4. *The State in its activity may enlist private services.* The private citizens in coöperation with public servants in various branches of the public service is one of the distinguishing characteristics of excellent administration in modern times.

It follows from the foregoing that the State is most efficient in the management of interests that are general, extensive, slow in bringing returns, and dangerous as tools of private interest. It is least efficient in the management of interests that are special and sectional, and of those which require minute supervision but do not convey dangerous power to private hands.

SUMMARY.

1. Public industry includes the part played by the State in private industry as well as the entirely public industries.
2. All private industries are largely dependent upon public activity.
3. All private industries are subject to demands on the part of the State.
4. The State is society acting through government.
5. State activity is conscious and volitional in its laws, while private activity is governed by laws which are largely unconscious.
6. State activity is as natural, though not as primitive, as private activity.
7. Associated activity is displacing individual activity, leaving us only the choice between the State and private corporations.
8. The State has greater scope, greater power, greater impartiality, and can more readily enlist private activities than any private agency.
9. The State is fitted for the management of interests that are general, extensive, slow in bringing returns, and dangerous as tools of private interests.
10. The State is ill fitted for the management of interests that are sectional and special and which require minute supervision.

QUESTIONS.

1. Define public industry; private industry. Do they involve different phenomena?
2. In what two ways are private industries dependent upon the State?
3. Define the State; its two meanings; which meaning is intended here?
4. Is public activity natural or artificial? Explain fully.
5. What choice is open as to means and methods of industry?
6. What are the advantages and disadvantages of the corporation as contrasted with the State? Of the State as contrasted with the corporation?
7. What interests are adapted to State management? To private management? Why?

LITERATURE.

Adams, H. C.: *Relation of the State to Industrial Action.*

Ely, R. T.: *Problems of To-day*, Chapter XVII to the close.

CHAPTER II.

FUNDAMENTALS—THE RIGHT OF PRIVATE PROPERTY.

By far the most important economic function of the State is the establishment and maintenance of those fundamental laws which underlie all private economic activity. Only the briefest statement of these is possible within the limits of an elementary work.

Private Property.—This is a right so fundamental in our modern life that we scarcely think of it as a creation of man maintained by constant vigilance on the part of the State and subject to human modification. Still less, perhaps, does it seem to us a right open to question. It seems like bed rock, an ultimate right, needing no other justification than its own obviousness. If we feel thus, however, about the right of private property or ownership it is only because we are dominated by present and local customs rather than by the facts of history or reason. We do not intend to impeach the right of private ownership, but it is a right which may as fairly be called in question as any other and must justify itself in the same manner. When a custom has obtained very widely and is deeply rooted in human life there is often a tendency to claim it as a "natural right." By a natural right men usually mean a right which is arbitrary, which is a right because it is a right, and "that's all there is about it." There are no such rights. All true rights are rational rights, rights which can show good reason for their claims and can justify their existence on the ground that they promote human welfare.

There is no possible basis of human right except human welfare. To claim that certain rights are ultimate without reference to their effect on society is to beg the question, and

has been well characterized as "dogmatism in disguise." It is characteristic of unscientific and superficial thought to talk much of natural rights, and it is an encouraging sign that in our day such rights are subjected more and more to searching scrutiny. It is, therefore, as scientists rather than as iconoclasts that we should inquire into this time-honored right of private property.

1. *Beginning of the Right.* Looking back into history we discover first that private property did not always exist. The savage at first owned nothing. Doubtless when he had caught or killed an animal he considered it more or less his, though even here it was the common property of the family or tribe rather than his own. Beyond this there were no property rights as we now understand them. Doubtless there were struggles for the possession of hunting grounds, but the victor's sense of ownership or right was little better developed than that of a victorious lion or buffalo. From these insignificant beginnings the right or sense of ownership has grown, including more and more articles and dividing up the ownership more and more, until at last nearly everything is owned and nearly everybody owns something. Not until the agricultural stage did land become property, and the last forms of tribal ownership have not yet everywhere disappeared before individual ownership.

2. *Strengthening of the Right.* The next thing that impresses us is that private ownership has not always been so extensive or so exclusive as at present. We have seen already that the institution of private property has been extended to many things which were at first free goods. It is equally noticeable that the right of ownership has grown in intensity and exclusiveness. This is especially marked in the case of individuals whose claims as opposed to those of the tribe were at first slight and vague; but they gradually grew, especially in the case of the chieftain, until tribal or communal rights broke down before them. The time was when a Scottish clan had absolute right to the territory they occupied, and no chieftain, however powerful, could have

abridged that right. Now there are beautiful tracts of country in Scotland which are almost denuded of their agricultural population because the owners, the descendants of these same chieftains, have preferred to raise game rather than men on their estates. All are familiar with the general liberty allowed in this country of hunting and fishing on private estates, which in Europe is unheard of. Slowly, however, we are beginning to extend our claim to game and fish also, and this leniency of ownership is disappearing.

Limitations of the Right by and in Behalf of the State.—1. *Taxation.* We next notice that the right of ownership, though tending toward absolutism as between individuals, yet never reaching absolutism even as between private persons, has never been anything like an absolute right as regards the guarantee of the State. The State has always reserved certain rights over private property, and while owners have gotten increasing guarantees of protection against other individuals they have been obliged to make increasing concessions to the State. Taxation, for instance, as understood to-day is a comparatively recent right. During the Middle Ages the right to take private property for the support of the State was stoutly resisted, and there was a strong tendency to regard taxation in the modern sense as extortion. It was in part a survival of this mediæval spirit, which made our forefathers so averse to British taxation and, later, to taxation by their own government. Now the right of taxation is universally admitted. This is the first, the most universal and the most serious limitation imposed upon the right of private property by and in behalf of the State.

2. *Eminent Domain and Requisitions.* The next limitation is the right of the State to appropriate specific pieces of property with direct compensation to the owner. This is done especially in time of war, when all kinds of supplies are seized and payment made as government sees fit, regardless of the owner's wishes. In time of peace such purchases are seldom necessary, though the right always remains. In one most important particular, however, this right is in almost

constant exercise, that is, in regard to land. As applied to the purchase of land this is known as the right of "eminent domain," which simply means that the State's claim to land is paramount. Transactions involving the exercise of this right are not simple seizure, as is the case with taxation, but genuine sales, with this important difference, that they are compulsory. These two rights are exceedingly comprehensive. The State may appropriate any portion of the property of its citizens without compensation, so long as it takes from all alike. It may farther buy any man's property to any extent at an appraised valuation and without his consent.

Limitations of the Right by the State in Behalf of Individuals.—We have now to notice still farther limitations placed by the State upon the right of property not now in its own behalf but in behalf of individuals. The first is the right of eminent domain exercised in behalf of individuals or private corporations. We have seen that private property has been more and more guaranteed against private trespass, but while the individual is thus prohibited from seizing another's property he may in certain cases get the State to seize it for him. This is illustrated in the building of railways. Railways in this country are built by private enterprise, but their right of way is secured by the right of eminent domain. This is simply a necessity, as no railway could be built without it. Added to this is the vast system of legal limitations to the use of private property with which we are familiar. Nothing is more fallacious than the notion that the right of ownership allows a person to do as he pleases with his property. Undoubtedly a man's property rights have often been so defined as to admit of much abuse, but it has been the tendency of the State to so limit the right as to exclude abuses, and such limitation is necessary to secure private property against attacks. Whenever a given right of property has proved to be generally unfavorable to the welfare of society government has modified or abolished the right or jeopardized its own stability by a failure to do so.

Historical Cause of Private Property.—If we ask the reason of private property we must distinguish between two things, the cause of private property in the past and the justification of it in the present. We will first consider the cause of private ownership. If we take the case of the savage who captures an animal, the chieftain who appropriates the land occupied by his tribe, the nation which dispossesses another nation, and ask the origin of ownership in each case we shall find it to consist in conquest or force. Property was owned simply because those who held it had the power to exclude others from the enjoyment of it. But how does this ownership come to be right? Simply by long continuance. The Normans held northern France at first by the most unjust force ; afterward by the justest of rights. Hardly anyone will deny that the original wanton seizure was unjustified ; but surely all will admit that after the lapse of centuries any attempt to expel the descendants of the invaders would be the grossest of wrongs. But how can a wrong become the basis of a right ? Simply by a change in the conditions of human well-being. This brings us to

The Justification of Private Property.—It is not correct to say that a wrong ever becomes the basis of a right. A violent seizure never in itself justifies ownership. Nothing can be more perilous than for the owners of hereditary rights to rest the justice of their claim upon its past origin. Few titles of long standing could be traced back very far without disclosing at some point violence or craft or fraud which the moral sense of the community would condemn. The dead past should not be urged either in justification or condemnation of existing institutions. *They must be judged by their relation to present and future well-being, and by that only.* Thus the seizure of Normandy was a wrong. It rudely disturbed the conditions of social well-being. For a similar reason the later retention of Normandy was right. Human life had adjusted itself to the conditions resulting from former wrong, and any disturbance of these conditions for the sake of old scores would have been a sacrifice of

human well-being and a wrong. Any attempt to rectify past wrongs when the disturbed equilibrium has been restored is an attempt to gather up spilled milk.

Should Private Property be Retained? — Those familiar with socialist doctrines are prepared for such a question, although the modern socialist does not propose to abolish private property altogether, but only in the instruments of production, as we shall presently see when we come to discuss socialism. In view of what has been said the question may be put in another way : Does private ownership promote the welfare of society—not the welfare of the owner simply, but the welfare of society as a whole? If it does not, then there can be no question ; private property should cease. The fact that I have long owned a thing, and that my father and grandfather owned it before me, is no reason why I should continue to own it. Of course we should make no changes for uncertain reasons, but if it is clearly proved that my ownership is an injury to society I ought to renounce my title and society ought to annul it. This is no place to discuss at length so great a question, but we may mention some considerations of importance. First, there can be no doubt that at present the ownership of property is the greatest incentive offered to private enterprise. It is by no means the only incentive, nor need it perhaps always be the greatest, but that it now is the greatest can hardly be doubted. The greatest thing in human life is its incentives, and while some incentives may, and naturally do, diminish in importance as new ones develop, to destroy a powerful incentive is a certain disaster. This single consideration, to which many others might be added, is in itself sufficient to justify the institution of private property.

But, inasmuch as private property has always been and must of necessity be limited, the question assumes another form : *How much* private ownership should be retained? We may lay it down as a general principle, making at present no application of it to details, that as private property

is a social institution it finds its limitations in the welfare of society. As soon as any of its forms or extensions become anti-social these should be suppressed. Private property is in general specially beneficial as tending to increased production, although some forms of it decrease production, owing to large waste involved. The disadvantage of private property appears particularly in distribution, although here its effects are partially beneficial. We must never forget that abundance of goods does not necessarily make a people prosperous. If they are so distributed that great goods are devoted to the satisfaction of little wants, and little goods to great wants, then certain individuals may be prosperous; but the majority of men will be miserable in the midst of abundance. That private ownership in some cases tends to this result can hardly be doubted, and in such cases no justification for it seems possible.

Influence of Private Property on Individual Wealth.
—As private property lies at the basis of the existing economic order it is the institution which, above everything else, determines what share of the total income of society each one shall enjoy, and every modification of the institution changes the distribution of wealth. Private property in railways explains a large proportion of the mammoth fortunes in the United States. Whether public ownership of railways would have been desirable or not, it is certain that it would have brought with it no such inequalities as private ownership. Even a change in the laws governing the transmission of property from the dead to the living in France brought with it a modification in distribution decreasing the number of those owning vast fortunes, and adding to the number of those enjoying a competence. Private property must be then remembered as the greatest force in the distribution of wealth.

SUMMARY.

1. Private property is the most important condition of private industry furnished by the State.
2. Like all other human institutions, it is subject to examination and change.
3. Human welfare is the only possible basis of human rights.
4. Private property originated in conquest and force, a fact which neither justifies nor condemns it.
5. The right of ownership was formerly less extensive and less absolute than now.
6. The State has increased the guarantees of private property as between man and man while asserting more extensively its own rights of taxation, requisition, and eminent domain.
7. The latter right is now frequently exercised in behalf of private interests.
8. Extension of private ownership tends to stimulate production and to concentrate wealth in large fortunes.

QUESTIONS.

1. Why is private property often held to be a natural right not open to discussion? What is a "natural right?"
2. What is the basis of human rights? Are they subject to examination?
3. What is the origin of private property? Does this justify it? Why?
4. What change has taken place in the extent of the property right? In its absoluteness?
5. Has the State increased or decreased its guarantees of private ownership as regards other private parties? As regards its own claim? Why? What farther extension of State limitations in recent times?
6. Should private property be retained? If so, how far? Why?
7. What is the effect of private property on production? On distribution? How far is the effect in either case beneficial? Why?

LITERATURE.

The subject of private property in its economic and social aspects is one which has been singularly neglected by English and American writers. John Stuart Mill treats it briefly in his *Political Economy*, Book II, Chapters I and II. The most satisfactory treatment found in economic literature is that given by Professor Adolph Wagner in his *Grundlegung der Politischen Oekonomie*. By far the best treatment of private property from the legal standpoint with which the present writer is acquainted is given by the distinguished German jurist, the late Professor Rudolph von Ihering, in the first volume of his *Zweck im Recht*. No one who would be well informed on this subject should neglect to read his masterly exposition.

CHAPTER III.

FUNDAMENTALS—GUARANTEED PRIVILEGES.

Trade-marks, Copyrights, and Patents.—Closely connected with the general subject of property is a legal arrangement whereby exclusive privileges are awarded in return for services to society. These privileges become a special form of private property, and have particular significance in the distribution of wealth, although they are not without importance in the production of wealth on account of the stimulus which they give to improvement.

Trade-marks come under this head. They give property in a design which characterizes the product of a single undertaking, as an individual manufacturer, a firm, or a company. It is altogether desirable that those who, by the superiority of their wares, establish a reputation should be protected from that contemptible class who, without energy or initiative of their own, attempt to steal the fruits of the exertions of others. It encourages a producer to establish a reputation to know that he can distinguish his goods by a design which others may not imitate.

Copyrights and Patents.—Government creates exclusive privileges by copyright and patent laws; but this is done professedly in the interest of the general public, and not of any favored class. Authors and inventors are granted exclusive rights in their productions for a limited period. This monopoly is considered a fit reward for valuable public services. Copyrights and patents have been objected to as interferences with natural liberty, but they appear to have justified themselves in the stimulus which they have given to authorship and invention. It must, however, be remembered that all intellectual effort is an historical product.

The telephone, for example, did not spring from the mind of one man, as Minerva from the head of Jupiter. The telephone was preceded by a century of scientific invention and discovery, most of it poorly enough remunerated. The telegraph was, similarly, the result of generations of careful, plodding industry of scores of men. Professor Henry, of Princeton College, whose services in connection with the completion of the telegraph were most distinguished, conscientiously refused to take out any patent. It also happens that several persons almost simultaneously and independently make the same discoveries and inventions. Now, if the man who makes the finishing touches which lead to utilization of a long line of work alone is rewarded, it is like paying only the workman who put the roof on the house. It is not generally understood how serious an interference with liberty patents are. A man who has a patent is allowed to say to all the rest of the world, "Because I have first done such and such things you must not do them." Yet there may be those who about the same time, without any knowledge of him, had found out how to do them. When a principle existing in nature is allowed to be patented, and not merely the application of the principle, the interference with liberty becomes still stronger. The practical conclusion is somewhat like this: Patents, like copyrights, are beneficial. Experience seems to warrant this assertion. Patents do not, however, rest on so strong a basis as copyrights, because no two persons could ever write precisely the same book, and the fact that I have written a book in no wise keeps you from writing any book you please. Yet even intellectual effort is largely a social product. No great author gives the world what was merely evolved out of himself. On the contrary, such a one lets an age speak through him. The principle which should govern copyrights is a clear one. It is to give an author reward for his services, not to give persons a reward for services which others have performed. As has been well said, were not copyrights limited we might now have a "Duke of

Shakespeare," deriving a large income from the services of a man who lived three hundred years ago.

Patents should not be granted on light and trivial grounds, and the period for which they are granted ought to be strictly limited, and subterfuges for the evasion of this limitation ought not to be suffered to succeed as at present. Moreover, owners of patents ought to receive their patents on conditions which will compel them to use them or allow them to lapse; also, to grant to others the right to use the patent on payment of a reasonable royalty. It has also been found beneficial in some countries to lay an annual and perhaps slightly progressive tax on patents, so that those which are not important or not used may not interfere with industrial progress, for it is a condition that non-payment of the tax works forfeiture of the patent. Laws ought also to be changed so as to prevent such an abuse of patents as we have frequently witnessed in our rural districts, where farmers have been induced to infringe patents unwittingly in order that damages might be collected from them. The suggestion of a former commissioner of patents, that the right of purchase of a patent be reserved by the United States, is to be commended. Our patents at the present time promote monopoly, and in some cases interfere senselessly, it is to be feared, with manufactures. The patent laws require to be simplified and amended and their abuses removed. At the same time reward should in some way always be provided for those who make valuable inventions.

The Right of Contract.—Scarcely second to the right of private property is the right of contract for the maintenance and value of which we are equally dependent upon the State. Some sort of contract lies at the basis of all associated activity. To secure the conditions of such activity two things are necessary: First, that men should be allowed to bind themselves; and, second, that they should be compelled to respect the agreement thus entered into. Both these are secured by the activity of the State. That such a condition of associated activity among men should be maintained can

hardly be doubted, but it too has its limitations, limitations resting here, as everywhere, upon human well-being. Limitations upon this right have been known in varying degrees and different forms from the earliest times. Legislation prescribes under what forms and conditions contracts shall be valid, and declares that under certain circumstances contracts shall be null and void. Experience has shown the necessity of this. Children, for example, cannot make valid contracts, for they are not presumed to have the requisite knowledge and judgment to protect themselves. Contracts which are clearly opposed to public policy are invalid. A contract whereby a person should sell himself into slavery would not be binding, yet the rule is the validity of contracts.

The Right to the Establishment of Private Enterprises is closely allied to the foregoing. This right to manufacture or sell what and when one pleases is a comparatively recent one. It has usually been greatly limited by despotic governments, and the right has been made a matter of sale for the purpose of raising revenue. Most such limitations have been of the nature of abuses, and our own time has seen the abolition of an immense number of hampering and vexatious restrictions designed for the plunder rather than for the promotion of private enterprise. Restrictions still exist, however, especially on the liquor traffic, which is subject to severe limitations. In this case there is of course a special reason for it. There is room for question whether entire freedom in the establishment of private enterprises is wholly profitable even in other cases. The tendency is often to multiply the number of competing concerns far beyond the point of greatest efficiency, and so to maintain a numerous body of poorly paid toilers and an expensive service for society.

Personal Liberty, including the right of movement and acquisition, is a right slowly acquired by society. It is not and never was and never can be an unlimited right. So long as men touch each other in society they must limit each other, or the liberty of one becomes the slavery of another. It is the endeavor of the State to equalize human liberty, not

to make it absolute, for this is impossible. The question is not whether we shall limit liberty, but how we can so limit it in each as to secure a maximum of liberty to all. Here most of all we hear men talk of "natural rights." When it is proposed to abolish the sale of intoxicating liquors it is urged that men have a right to drink what they please. When a man becomes a pauper through drink he claims that he has a natural right to live and that society owes him a living. If he leaves a helpless family at death the same claim is made for them. Strange that men so seldom think that society has "natural rights" of self-protection against those who prey upon it. Liberty is indeed a great good, but we must freely submit to restrictions upon our liberty—even *for the sake of liberty*.

For the maintenance of these fundamental conditions of private enterprise, namely, private property, liberty of contract, liberty in the establishment of enterprises, and liberty of person, we are dependent upon the State. No other instrument of society is adequate to this task. Self-help in these matters, in a narrow sense of self-help, opposing self-help to government activity, is not only insufficient for most of us, but when exercised by the powerful, who prefer it, is pernicious. There is a tendency of vast corporations in the United States to use self-help in protection of property, supporting armed forces to this end. This sort of self-help is the beginning of anarchy, and tends to bring us back to a condition of semi-civilization. Fortunately, legislation is restricting the right of self-help in these cases. This is a point on which there is virtually no disagreement. The maintenance of these fundamentals, if they are to be maintained at all, can be accomplished in no other way. When the State attempts this and little more its policy is said to be passive. Without its activity production, in its present form, would be utterly impossible. And yet when its sphere is so restricted we cannot say that the State participates actively in production, as this word is generally used. This passive policy is also called the *laissez-faire*, or let-alone policy.

SUMMARY.

1. Trade-marks, copyrights, and patents are privileges guaranteed to inventors, authors, and reliable manufacturers to reward and stimulate their efforts.
2. All such efforts are largely social, however, and rights conferred should be compatible with social interests.
3. Patents should be more stringently limited than now on account of their exclusive and largely fortuitous character.
4. The right of contract is a condition of private enterprise furnished by the State. Like the right of property, it should be preserved and limited.
5. The right to establish private enterprises, formerly much limited, is now approximately free; it may require some limitation.
6. Personal liberty, including freedom of movement, is a right slowly acquired and subject to some inherent limitations.

QUESTIONS.

1. What is a trade-mark? A copyright? A patent? Which is most clearly justifiable?
2. What dangers attend the issue of patents? Do they apply to copyrights as well? Why?
3. What element of injustice is involved in these privileges?
4. What two elements are involved in the right of contract? Under what conditions is this right safe?
5. What dangers attend freedom in the establishment of private enterprises?
6. What natural limitations are there to the right of personal liberty?

LITERATURE.

Annual Reports of the United States Commissioners of Patents, especially the Reports for 1888.

CHAPTER IV.

STATE PARTICIPATION IN INDUSTRY.

WE have seen that the State's first service to economic activity is the maintenance of certain fundamental conditions which are the necessary conditions of that activity. We have now to consider another set of conditions furnished by the State, conditions less fundamental and more nearly allied to the private factors of production, but of such a nature that only the State can furnish them efficiently.

Industrial Facilities.—Under this head may be placed roads, river and harbor improvements, lighthouses, and other public works whose purpose is primarily to facilitate industry. These are closely allied to capital invested in private plants, but they are works of such general utility, and their service to individual industries is so indefinite and difficult of calculation, that only the State can or will undertake them. To a limited extent roads may be built by private individuals and the cost be defrayed by charging toll, but this never produces a satisfactory and adequate road system. To a still more limited extent private contributions may aid the construction of works of general utility; but the experience of all nations has shown that undertakings which require great outlay, and promise only vague and remote returns difficult of collection, will not usually attract private enterprise, and the service, when rendered by private enterprise, is not satisfactory if we view its results from a broad social standpoint.

The only questions, therefore, are as to which department of government should be intrusted with this economic function and how much should be done. On both these questions there has been much debate and much unsatisfactory

experimentation. In the case of roads the policy has prevailed of leaving their construction and maintenance to the city, village, or township. This policy, combined in the rural districts with an antiquated and vicious system of taxation, has resulted in a system of roads which are a national disgrace. This extreme localization of responsibility has fostered narrow views and niggardliness which has brought as a result impeded and impoverished rural industry. This mistaken policy is largely due to a reaction against unwise outlays made at an early date in many States at a time when resources were meager. The result was burdensome debts which some of the States repudiated, and in some States clauses were inserted in the constitution prohibiting expenditure by the State for roads and similar improvements. This explains the policy but does not justify it, and it is encouraging to note that an agitation in favor of road improvement has begun which promises substantial results. The mistake seems to have been in defining local interests. Because a mile of road is in a township it does not follow that it is a township interest. It may and often does form a part of a far-reaching and important system, and represents interests which the town will quite fail to appreciate. A post office is local in situation; but suppose townships were left to operate their own post offices; would they do it adequately, and if not, would none but local interests suffer? In sharp contrast to our road system stand our river and harbor improvements, in connection with which the policy of national maintenance has prevailed. Whatever may be said of jobbery and mismanagement in connection with these improvements, their record has been economy and efficiency itself compared with the wasteful and shiftless management of our roads.

Bounties, Subsidies, and Franchises.—Under this head are included a great number of tangible encouragements, not to private enterprises in general, but to particular enterprises. They differ from industrial facilities, which we have just discussed, in that they are not public works opened to private use, but transfers of goods to particular

individuals or private corporations to encourage their undertaking.

Bounties are sums of money offered as inducements to private parties. During the late war they were offered to induce men to enlist in the army. As their use in such cases is exceptional and due to emergencies which do not ordinarily arise and do not directly concern industry, we may omit this part from our discussion. Bounties are, however, paid by many governments for producing certain goods, which for various reasons it is deemed wise to encourage. The example familiar to us is that of the sugar bounty of two cents per pound on sugar raised within the United States. Canada offers bounties on iron ore mined, etc.

Subsidies are closely allied in principle to bounties. They are payments to those undertaking enterprises of importance to the public but too extensive to be directly remunerative. They are usually in the form of annual payments of a fixed sum. Money subsidies are common. Such are the subsidies to steamship companies which have been voted at one time and another by nearly all powerful nations.* Subsidies have been granted to many other objects. In some of the countries of Europe theaters and operas received annual subsidies.

Land Grants.—Subsidies are not always in money. A frequent form of subsidy to railways and canals in this country is known as the land grant. Railways built through unsettled territory have often received grants from government of alternate sections of the government land for a dis-

* Steamship subsidies have several times been granted by our federal government. A subsidy of \$350,000 per annum was granted to a line running to Germany in 1847, and others soon after, and in 1852 our government paid \$1,946,686 in subsidies to encourage the development of an American merchant marine. The system was discontinued in 1858, but resumed in 1865. It developed extensive scandals, and was abolished again in 1875. The policy has seemingly been resumed by the last Congress in the mail contract granted to the "American Line" of steamships by the conditions of which the *Paris* and the *New York* were registered as American vessels.

tance of some miles on each side of the railway. These grants, which might perhaps better be classed as bounties than as subsidies, have been the subject of much dispute and the occasion of great abuses. Railways which have failed to comply with the conditions of their grants have not unfrequently managed to keep possession of them in defiance of obvious justice.

Loans of public credit are another kind of subsidy. They are in principle a guarantee of private indebtedness by government. The most prominent example of this in our history is the so-called *Crédit Mobilier Company*, organized for the building of the Union Pacific Railway. The federal government, in addition to an imperial land grant aggregating over thirty million acres for the Union and Central Pacific Railways, guaranteed the indebtedness of the company for \$25,000 per mile of road in addition. This remarkable subsidy, almost sufficient to build the road, was secured by extensive bribery in which many members of Congress were implicated. This has been pronounced by a recent writer to be "probably the most extensive legislative scandal ever known in the United States." The uselessness of the assistance is seen in the fact that the money was virtually "absorbed" by the construction company which had corrupted Congress to secure it, and added practically nothing to the value of the road.

Franchises may for our purposes be distinguished into two classes, namely, franchises in a broader and franchises in a narrower sense. Franchises in the broader sense are special rights and privileges conferred by a legislative body which could not be exercised otherwise. The power granted to a number of men to act as a corporation is itself a franchise, and the various attributes of the corporation are its franchises.

Franchises in a narrower sense are grants of the use of public property for private enterprises. Such is the right granted a street railway or gas company to lay its tracks or its mains in the streets. A franchise may be granted for a term of years or forever ; it may be granted free or sold for

a specified amount or for a percentage of receipts ; it may be granted unconditionally or conditionally. But however it be granted it maintains one character at the bottom; it is a bargain between private parties and public officials for valuable public property. In general the interests are great, the officials few, and the private parties wealthy. If corruption is possible these are the conditions to produce it. It will not surprise us, therefore, to find that after the *Crédit Mobilier*, perhaps the next greatest scandal in the United States of recent years is connected with the granting of franchises. In 1884 thirteen out of twenty-four aldermen in New York formed an organization for the purpose of selling franchises and agreed to vote together on all "business transactions." They held frequent meetings, at which they debated offers from private corporations. The Broadway Surface Company offered them \$500,000 for a street-car franchise, which was granted *free*. Being vetoed by the mayor, it became necessary to enlarge their "organization," and before it was finally passed over the mayor's veto twenty-two aldermen were implicated. The fraud was fortunately discovered and some of its perpetrators punished, but none of the immense value of the property thus lost to the city was recovered.

It is useless to reproach those men. Culpable as they certainly are, they are in no small degree the victims of a system which corrupts private parties as surely and effectually as it does the State, and for which society as a whole is responsible. It is surely desirable that good men be chosen to office, but as surely as carrion attracts vultures, rather than doves, so surely will a system which holds out special possibilities to rascality attract men who will profit by these opportunities. It is doubtful if a government ever existed in a developed country which could safely trust itself with the management of the vast private interests which our civilization has developed. Certain it is, no society ever before asked of its officials such impossible virtues, or obtained them if it did.

We have said already in speaking of the functions of the State that it is ill adapted to enterprises of a special nature, that is, enterprises which profit a part of its citizens rather than the whole. We might expect, then, that the history of State aid to the special industries would not be wholly flattering, and we shall not be disappointed in this expectation. Much is said about corruption in *public* undertakings. There is relatively little such corruption, as we shall see later. Corruption occurs in *mixed* undertakings, in which part of the transactions are secret and irresponsible and bribery is made both lucrative and safe. While an occasional public enterprise, like the building of the Capitol at Albany, has been characterized by extravagance and inefficiency, and perhaps gross frauds, such cases are the exception. On the other hand, the history of government aid to private corporations has scarcely a clean page. The reason is not far to seek. A public transaction is wholly public. Every step in it is open, not only to the inspection of officials, but often to that of private individuals as well. Even when officials are lenient and the public negligent the opportunities of embezzlement are comparatively few. There is always a chance, and generally a likelihood, of detection. A private corporation, on the other hand, is *private*. It can conceal profits, falsify accounts, water stock, and in a thousand ways conceal the nature of its transactions. If it spends money to buy up a legislature the public frequently does not find it out. This power is bad enough when there is no question of government aid, but when private interests are enlisted to secure subsidies, land grants, franchises, etc., their power is a menace to the very existence of liberty.

Another difference between public and mixed enterprises is that the former are much more readily changed. When the State decides upon a public undertaking, it does so by statute, which can be amended or repealed as need requires. But corporations are organized under charter, and, however injurious to society, these charters, having been declared contracts by our courts, are made inviolable by our federal cor

stitution. Mistakes thus made by the government in these mixed undertakings cannot be remedied, as in the case of strictly public enterprises. This branch of our history is full of instances of exaggerated privileges conferred on private corporations for long terms or in perpetuity, and which simply had to be endured.

It is hardly too much to say that the principle of State aid to special enterprises is the most vicious and uncontrollable of all forms of State activity. While it may be and doubtless is justifiable in certain cases, all experience points to a reduction rather than an increase of the number of mixed enterprises. It is no implication that legislators are worse than other men, to say that their integrity should not be exposed to the extreme test which it has so often and so signally failed to bear. Where in the annals of contemporary public enterprise can we find a parallel to the *Crédit Mobilier* in America, or the Panama Canal scandal in France? The corruption of government is a sad fact, but it is largely a corruption *by* private interests. This leads us to the second objection. There is no necessity for it. Private enterprises which, because of their magnitude or because they are undertaken for the general interest, cannot succeed without public aid are unfit for private management.

SUMMARY.

1. State participation in industry in its simplest form consists in the furnishing of free industrial facilities, roads, harbors, etc.
2. The public roads in the United States have been generally left to units more local than the interests involved, and have been neglected in consequence.
3. River and harbor improvements have been committed to the central government with better, though not ideal, results.
4. Bounties and subsidies are payments of money to encourage private enterprises.
5. Land grants are a form of subsidy to railways and canals.
6. Loans of public credit are public guarantees of private indebtedness.
7. Franchises are grants of privilege, or, more narrowly, grants of public property for temporary or permanent use by private parties.
8. All these forms of public aid to individual enterprises have been more or less productive of corruption wherever adopted.
9. Mixed enterprises are less responsible to the public than public enterprises.
10. Mismanagement of mixed enterprises is more difficult of correction than of public enterprise, being protected by charter rights.
11. Private enterprises requiring extensive public control are safer in the hands of the State.

QUESTIONS.

1. Why should the State build roads? If left to private enterprise what would be the result?
2. What is the advantage of the county or State over the township in road building, and *vice versa*?
3. What policy has prevailed in the United States in road building? in harbor improvement? What are present tendencies?
4. What is a bounty? a subsidy? a land grant? a loan of public credit? a franchise? What is the danger of each? Why?
5. What are the objections to State participation in individual private enterprises? What other policy is possible?

LITERATURE.

Hudson, J. F.: *The Railways and the Republic.*

CHAPTER V.

STATE REGULATION OF INDUSTRY BY TAXATION.

WE have to do, not with taxation as a means of raising revenue, the consideration of which comes later, but with taxation as a measure of repression or encouragement. Such taxation is of two kinds, taxation on domestic products and taxation on imports.

Tax on Domestic Products.—When duties are laid on a great variety of manufactured domestic products, most of them are purely revenue duties. Such was the case during our last war with our “internal revenue,” and often in the history of many European countries. Such duties are also frequently called excise duties. No government lays duties in general for the purpose of restricting or repressing the development of its own industries. To this rule, however, England and America have made a few undoubted exceptions. The tobacco and liquor industries need limitation of the most stringent character, as many people believe, and this sentiment expresses itself in these countries by restrictive taxation. In England this restrictive character of the tax is less marked, and the need of revenue would probably keep the tax in force even if the theory of restriction were not held; but in the United States this purpose of the tax is so strongly marked that at a time when our revenues were excessive and a means of reducing them was earnestly sought the sentiment in favor of those taxes was strong enough to prevent their repeal.

The history of our internal repressive taxation has at least two lessons. In the first place, the tax must not be too high. Beyond a certain point it fails to repress and results in evasion and corruption of officials. During the period when

whisky was overtaxed in our country it was constantly sold in our markets at less than the amount of the tax. What clearer proof could there be that the law was evaded? Another tendency was developed at the same time, perhaps even more pernicious, namely, the adulteration of liquors with poisonous ingredients. The fearful character of the intoxicating liquors sold here at and since that time is in large part due to habits fostered by injudicious efforts at repressive taxation.

The second lesson is that repressive taxation on industries of this character exercises but a feeble influence in the direction of repression. Probably the most efficient service such a tax renders is to shift consumption from a heavily taxed and supposedly more injurious liquor to a more lightly taxed and presumably more innocent one. This result has sometimes followed in a marked degree, but beyond this a principal argument for such taxes must be the revenue they produce.

Protective Duties.—These are duties levied on imports with a view to increase the price of goods brought from abroad and so “protect” the home producer against foreign competitors, and thus regulate commerce in his favor. This regulation is called *protectionism*, and it will at once be recognized as a vast subject which could easily be made to fill several volumes like the present. It will here be possible merely to mention the main points in the controversy between those who believe in this kind of regulation—protectionists—and those who do not—free traders.

Arguments of Protectionists.—It is argued in favor of protectionism that it promotes nationalism, and this is held to be a good thing. It is urged that domestic trade draws the citizens of a country together, while international trade is cosmopolitan and tends to their separation. Protectionists maintain further that protective tariffs are necessary in order to build up a diversified national industrial life. They claim that there exist in a new country like the United States many natural industrial advantages of which the inhabitants cannot avail themselves unless they are at least temporarily

protected. Government should, they say, foster infant industries, in order to develop our natural resources and to produce diversity in industrial pursuits. The diversified-national-industry argument and the protection-to-infant-industries argument are thus supplementary. It is held that older nations, with their superior capital and acquired skill, will break down new pursuits in their infancy in order thereafter to have the market to themselves. Closely connected with this is an argument based on military grounds. It is often thought by protectionists that industrial national independence prepares a nation better for international war. The home-market argument for protection naturally follows. A home market is claimed to be superior because it is alleged to be a surer market. Producers are less likely to be deprived of it by war and other emergencies. It is, moreover, urged that it is beneficial especially to the farmer, because it saves the expenses of transportation of products to foreign lands. It has also been maintained by the distinguished American economist, Mr. Henry C. Carey, that a country can remain permanently prosperous only on condition that what is taken from the soil should be returned in manure and other kinds of fertilizers, and that this will be accomplished only when products are consumed at home.

Finally, protection has been advocated in the United States, especially since about 1840, when the labor movement began to assume prominence, on the ground that it has been the cause of higher wages in the United States than in European countries, and that it is necessary to maintain these high wages, which are said to be one main cause of our higher civilization.

Arguments of Free Traders.—It is frequently alleged that protective tariffs are a violation of an assumed natural right of every man to buy his goods where he will and to sell his products wherever he sees fit, untrammelled by human laws. The question of natural right has been sufficiently considered elsewhere. It is much to be desired that arguments of this sort should cease to be heard so frequently.

It has been claimed that the protective tariffs in the United States are unconstitutional. It would be most unfortunate and anomalous if nowhere in our country were lodged the power to pass such regulations regarding international commerce as might appear to be required for the promotion of the public welfare. But this argument is idle. It does not correspond to the opinion of our best jurists, and it is very certain that we shall never see a supreme court in the United States which will venture to pronounce protectionism unconstitutional. Protectionism has been called socialism, but this epithet of malignity is so generally applied to whatever a person incompetent to argue a cause does not like that it will scarcely terrify any one.

The really able arguments of free traders are those which aim to show that protectionism on the one hand fails to accomplish its ends, or is needless for the accomplishment of the ends it contemplates; on the other hand, actually does accomplish positive harm. It is denied that protectionism is necessary to foster nationalism, and modern experience presents strong testimony to support this denial. During the past fifty years international commerce has expanded marvelously, and international communication has been in every way facilitated, while at the same time we have witnessed a remarkable growth of national feeling all over the civilized world.

It is not clear that protective tariffs are necessary to produce a diversity of pursuits in a great country like the United States. It is admitted that a purely agricultural nation is not likely to progress rapidly; but it would seem that our enormous extent of country, our varied climate, our natural gifts of all sorts, had in themselves amply provided for sufficient diversity, and it can scarcely be maintained that one or two pursuits, more or fewer, can be of importance. A vast number of pursuits means widely extended division of labor, and this is by no means an unqualified blessing.

The argument for protection on the ground that it is a benefit to the wage-earner does not seem to the writer conclusive. When this argument is analyzed and answered in

detail it is seen to involve a discussion of many complex economic problems. One consideration only will be suggested in this place. Labor comes in competition with labor, not directly with commodities. Labor desires commodities, and the more commodities it receives the better. Now, if it is desired to protect labor, a tax ought to be put on imported labor, and labor ought thus to be rendered scarce. If this were done, then those who desire labor would be obliged to pay heavily for it, as actually happened in England after the "Black Death" in the fourteenth century had killed off a large part of the laboring population. If it is desired to benefit labor it would seem to the author that after importation of labor has been taxed, and labor thus rendered scarce and dear, the importation of such commodities as are consumed by wage-earners primarily should be encouraged in order that labor might secure an abundance of them cheaply.

It is maintained by free traders that protectionism is especially injurious because it diverts industry from a more to a less productive channel. It is held that industrial forces, if let alone, will seek those fields which yield largest returns, and that if government artificially induces them to take another direction the factors of production become less fruitful and the national economy suffers.

It is, moreover, alleged that protectionism fosters monopolies because it shuts off international competition. Recent combinations of domestic producers, as seen in trusts, which control so large a portion of the industrial field, would seem to support this allegation. It is certainly taken for granted that if foreign competition is shut off or lessened home producers will still compete. That has been one of the fundamental arguments of protectionists, but now we find home producers combining to put an end to home competition. It is scarcely too much to call this an abuse of the principle of protection.

Some General Considerations ought to be kept in mind in tariff discussions. First, its importance is exaggerated. We find a country like England prosperous under

free trade; we find countries like France and the United States prosperous under protection. It is of real but not of vital importance. Domestic trade exceeds in its aggregate amount in the United States almost immeasurably foreign trade. The domestic trade of the Mississippi valley alone is far greater than our entire foreign commerce. It is much to be desired that other economic questions should be more discussed.

Second, statistics about a country's prosperity, urged either for or against protection, are, as usually presented, of no value. The tariff policy of modern countries has been a minor factor in their industrial life. Inventions and discoveries, especially the application of steam to industry, and the growth of intelligence, have been the chief forces which have made such astounding additions to the wealth of the world during the nineteenth century.

Third, bad as it may be in many respects, the American tariff is an historical growth, and during the century of our national existence it has taken deep root. It has become part of our life, and it cannot be suddenly eradicated with impunity. If it is true that American labor would be better off without it, it does not follow that it ought to be removed suddenly in the interests of American labor. If an industrial growth is abnormal it is none the less true that adjustment to normal conditions is a painful process and should be conducted cautiously. Displacements of labor and capital cause suffering and loss. At the same time, it is impossible to tolerate permanently a bad condition of things, and while rashness is to be deprecated progress should be insisted on.

Our capital has become enormous. Skill has been developed in our country, and it is not clear that our industrial leaders are not quite capable of holding their own with the world in a free market. The fact that labor receives a large share of the product, if such is the case, does not render labor and the other factors of production less fruitful. Does the American farmer abandon the cultivation of land because out of a hundred bushels of wheat grown he must

give the American laborer, say, fifty, while his European rival gives only thirty bushels out of a hundred? He still has fifty bushels left.

This is only a small part of the subject of protectionism and free trade, a very small part, but it is trusted that it will prove suggestive, and that no one will terminate with this his tariff studies.

It may be said in conclusion that reform of the tariff is possible both from a protectionist and from a free trade standpoint. One thing desired is simplicity in our tariff system, which is now complex. No article should be taxed unless there is some good reason for it. Other things being equal, the fewer articles taxed the better. Reductions in duties wherever practicable should be made. *Specific duties*, that is, duties which are calculated by weight, measurement, or count, as simple and less provocative of temptation, are from the standpoint of honest administration preferable to *ad valorem duties*, that is, duties which are a percentage on value, a thing so hard to be determined.

The main disadvantages of specific duties are two, namely: In the first place, they frequently conceal the real amount of the tax. Five cents on an article does not seem a high tax when mentioned, but if the price of the article is only five cents it is a tax of one hundred per cent, which has a very different sound. In the second place, it is not easy in a system of specific duties to tax articles consumed by the rich more heavily than those consumed by the poor. A tax on cloth of five cents a yard makes no distinction between cheap and expensive cloth. Of course, silk goods may be taxed more heavily per yard than cotton goods, wine more heavily per gallon than beer, and so on indefinitely. But this is only an approximation to proportionality. We can only say that specific duties are to be preferred when their peculiar disadvantages do not more than counterbalance their obvious advantages.

SUMMARY.

1. Taxes on domestic products are laid usually to raise revenue; rarely, as in the case of liquors and tobacco, to restrict consumption.
2. Such taxes, if too high, produce evasion and adulteration, each more objectionable than the normal consumption.
3. Taxes on imports are for revenue or to "protect" home production.
4. Protection is defended as encouraging nationalism, diversification of industries, and industrial independence, saving transportation, keeping up the soil, and maintaining high wages.
5. It is attacked as contrary to natural right, unconstitutional and unnecessary either to develop industries or national sentiment.
6. A tax on laborers imported would seem to be a better protection for American labor than a tax on goods.
7. Protection is said to foster monopoly and pervert the natural course of industrial development.
8. Present tendencies to monopoly indicate an abuse of protectionism.
9. The tariff has been intentionally exaggerated in political discussions.
10. It is deeply rooted here, and must be corrected or removed slowly.
11. A reform in the details of our tariff system is needed from the standpoint of either protectionism or free trade.

QUESTIONS.

1. What two purposes may justify an excise tax? an import tax?
2. What difficulties are there in the way of an excise for restricting consumption? What results are actually accomplished?
3. What is protection? What arguments favor it? How far is each valid?
4. What arguments are urged for free trade? How far is each valid?
5. What is the relative importance of the tariff controversy in politics?
6. What is the value of statistics in tariff arguments? Why?
7. What objection is there to a sudden change in the tariff system?
8. What possible ways are there of protecting labor by taxation?
9. What are the advantages of *ad valorem* duties? Of specific duties? The disadvantages of each?

LITERATURE.

- List, F.: *National System of Political Economy*; an able protection work.
- Taussig, F. W.: *Tariff History of the United States*; the work of a fair-minded free trader.
- Patten, S. N.: *Premises of Political Economy*; new view of protection.
- Thompson, R. E.: *Protection to Home Industry*; a popular presentation.
- Ely, R. T.: *Problems of To-Day*. Chapters I-XV. Argument for tariff reform.

CHAPTER VI.

STATE REGULATION OF INDUSTRY BY POSITIVE STATUTE.

WE meet here a mass of legislation which it is impossible to examine or even to mention in detail in the short space available. It is the result of one of the most stubbornly contested battles in all economic history, but a battle now decided so far as the principle is concerned. We have touched briefly upon this struggle in Book I in speaking of the non-interference theory promulgated so vigorously by Adam Smith and his followers. The essence of this was that the State should let industry alone ; that beyond providing the fundamentals and the most general industrial facilities any interference on the part of the State is productive of more harm than good. There was a profound reliance on the regulative power of competition, which is the balanced equilibrium of self-interest. The mistake of the older economists lay in treating it as though it were the *only* regulative force. The fact is that competition is only one of a number of forces which balance each other, and if the other forces are removed competition itself soon disappears. Now, one of the most fundamental and natural of these forces is law, the expression of the ethical sense of society through the organ of government. It is as natural for men to make laws as to try to "buy cheap and sell dear." The attempt to regulate industry by competition alone was an attempt to travel on one leg. At the first jostle it was necessary to call the other leg into service or tip over.

Labor Legislation.—Legislation in behalf of labor was soon found necessary. It became evident that workmen did not by any means move about sufficiently to secure the high-

est wages, that they did not quit the employer who was careless of their lives and safety, above all that they did not limit their numbers in a way to prevent a fall of wages. The reason is plain when we stop to think of it. Wage-earners have families and are attached by many ties to the places where they live ; they are poor and cannot move to distant localities ; they are ignorant and do not know where better wages are to be had ; they are improvident and do not prepare for the future wisely, especially for a future which mostly concerns posterity. In a word, they are incapable of competition on equal terms. Employers, too, do not do as they were expected to do. It is for their interest to develop a strong and efficient class of workmen, but they sadly neglect their interest in this regard. It cannot be claimed that employers as a class have taken any considerable precautions to maintain a high standard of efficiency and well-being in workmen, though they would be better off as a class if they did so. The reason is that their *immediate* interest is in lowering wages, and they cannot under a system of fierce competition ignore their immediate interest while seeking to promote *ultimate* interests, for those who did so would be speedily driven to the wall by those who did not. It is just here that the necessity for law or *collective* social action appears, namely, to enable men to substitute large and ultimate interests for immediate and destructive ones. It would be unjust to employers to assume that they do not care for their employees. The most would be glad to deal more liberally with their men, but a few will not, and by their competition they compel the rest to do as they do or leave the business. This gives us a fundamental principle of the utmost importance. *Under pure competition the least scrupulous competitor tends to impose his moral standard upon the rest.* An instance of this is found in the case of barbers who on different occasions in large cities and recently in national convention have resolved to agitate for a law closing barber shops on Sunday. As a class they desire this, but a few will keep their shops open, thus compelling the

rest to do so or lose their regular customers upon whom their business depends.

Exactly the same need of law appears in connection with wage-earners. Without legal regulation we may expect as a certain result, first, a lowering of wages through competition (or what amounts to much the same, a keeping down of wages when general prosperity is increasing); second, a substitution of women and children for men in easy employments with a lower wage and a farther ultimate reduction in the wages of men, so that not infrequently after women and children are employed the wages of a whole family are no more than the wage of a man before; third, the destruction of home life and home economy and the great extension of immorality; finally a permanent reduction in the standard of life. This progression is the chief disaster which can befall any people.

1. *Laws Restricting the Employment of Women and Children.* We must insist upon a limitation of labor for children which will allow a sound physical and mental development. Not only are most employments injurious to the health of children, but they all interfere with education. Even if we gained in goods by child labor (which on the whole we do not do) we should and must sacrifice this advantage rather than wrong the future citizen and jeopardize the republic by neglecting his education.

The case of women is equally imperative. As mothers they must neglect their children if they work in factories. Infant mortality and disease are the certain result. This is by no means all. It is a mistake to suppose that we are rich simply in proportion to our goods. We are rich also in proportion to the use we make of them. What can we expect in homes where parents and children simply come home to sleep? Thrift, neatness, comfort, to say nothing of affection and the thousand elements of value in home life and associations, can scarcely exist. This is emphatically a case where the wage-earning classes would be richer with fewer goods, with time left to attend to the problem of consumption of

their income. But goods would not be less. Of course legislation cannot prohibit female and child labor, but it can and should limit it strictly with a view to the facts here considered.

2. *Laws Limiting the Hours and Days of Labor.*—Nothing at first seems more unnatural than to forbid a man's working as long as he likes. This would actually be the case, if he worked for himself, but "no man liveth unto himself." It is a demonstrable fact that if a small minority of workmen in a community are willing to work twelve hours per day under the competitive system the rest will have to do so. They probably get no more wages and produce no more goods; they simply live so much less and retard human progress. It is the same as with the barbers. *Without law it takes practical unanimity to carry a point; with law a majority can do so.* The unanimity is impossible. When a large majority of society favors a change, which should rule, it or the minority? We may lay down the following principles in confidence :

First, the working days should be limited, with different limits for men, women, and children. Sometimes the limit can be established by private combination, and legal limitation is not required. It has been observed that in the absence of well-enforced legislation the working day is apt to be longer in those manufacturing establishments in which women and children are employed than in those in which men are employed, because the latter can combine more effectively. Private combination to effect a reduction of working hours has both limitations and disadvantages. It is not likely to be effective in an occupation unless a considerable degree of skill is required in it, because otherwise it is not possible to bring about common action among nearly all competitors for employment, and, as just stated, a small minority can defeat the wishes of a vast majority. It is to be remembered that industrial invention and progress have broken down the barriers between occupations and made it comparatively easy to learn to do new work in a manufactory.

Private combination is, therefore, less effective than formerly, and this may explain the favor with which legal regulation of the length of the working day is received in a country like England by the very classes which a few years since rejected it. Private combination would, in the light of recent strikes in the United States, not seem to be sufficient for employees of vast corporations like our American railway companies. Private combination has its disadvantages, because it causes serious loss in strikes which attend it and because it inconveniences and injures innocent third parties, namely, the general public. When the public interest is so great, as in railways, it would seem the only rational course to have public regulation of the hours of labor, establishing a normal working day, and, with this, public preservation of the peace.

It is to be noticed finally that in ordinary manufactories it often appears to be sufficient to establish a normal work day for women, children, and young persons, as when these stop in establishments in which their work is essential the entire working force must also quit work. It is customary in England at present to limit the day only for these three classes named.

Second, Sunday labor should be limited to the real needs of society. The day is needed for something else than getting a living.

Third, employers should be compelled to take due precautions for the safety and health of employees.

Fourth, law should be invoked in those cases where a minority can thwart the purpose of the majority or otherwise seriously injure society.

Just how long a working day should be we cannot here discuss. Ten hours is doubtless a maximum, and there is some reason to believe that an eight-hour day in manufactures would prove equally productive and be of immense gain to society. Instead of so short a day of labor a shorter week, allowing a Saturday half holiday, has some decided advantages. This system, which is in vogue in England, is at least worthy of careful consideration in this country.

3. *Laws Regulating Labor Contracts.*—These have been found necessary almost everywhere. Laborers are notoriously unable to make prudent contracts, and the courts are frequently given power to set aside such contracts and substitute more equitable ones. A law of the most sweeping character has often been urged, establishing a minimum rate below which wages could not go. There is something to be said in favor of such a law, but unfortunately one serious objection to it aside from the very great difficulties of carrying out its provisions. While laws limiting the hours and establishing the conditions of labor all tend to develop and uplift the workmen, this simply tends to give him more goods. As we have said, this alone cannot help him. If it resulted in wastefulness or simply in increase of numbers, as might be the case, such a law would enlarge society without benefiting it. It is doubtless better to enact laws affecting the wage-earner indirectly, and, by making him more intelligent and capable, to try to enable him not only to secure but to profit by a larger income.

Laws Regulating Monopolies and Trusts.—The legislation we have been considering has been developed mostly in England, and grew out of the inability of employees to compete with their employers. Different conditions in America have shown the inadequacy of competition more especially on another side. Competition is as unable to protect the consumer as the wage-earner. The breakdown of competition has in many cases been complete, and society has found itself face to face not with rivals who vied with one another in offers of cheap service, but with monopolists who exacted what they could. Of late law has been freely invoked to protect society from their extortion. The justice of such laws can hardly be doubted, but their expediency and efficiency is by no means so clear. The case is simply the converse of what we considered under subsidies. The private interest which will use its resources to secure a vote of land or money or other advantage will do the same thing to ward off a threatened tax or vexatious regulation. Railways furnish a familiar

illustration. In every legislature they keep a powerful lobby which often dictates all important legislation. Not to mention other forms of bribery, which, of course, are private, a most demoralizing species familiar to everyone is the giving of passes. In the legislature of a Western State a number of railway lobbies keep clerks writing passes all the time. A single State legislator is said to have received and distributed a thousand passes in one session. These passes are even sent to people who do not ask for them, in the hope of winning their political support. In this State alone the fares represented by these passes amount to hundreds of thousands of dollars. It is needless to say that the people pay for these free rides, but this is not the worst. It is a species of bribery by which the State is plundered, its government demoralized, and its citizens corrupted. It is astonishing that conscientious people are so slow to recognize the nature of the crime in which they thus participate.

When public clamor at last secures the passage of a law the same corrupting agencies are turned against the officers charged with its execution. It would be hasty to conclude that anti-monopoly laws cannot succeed, but it surely cannot be claimed that they have so far succeeded. The lesson of State assistance, tax regulation, and statutory regulation is the same. When private interests become monopolistic and powerful they not only do not serve society reasonably, but all efforts to compel them to do so result in the corruption of government and in ignominious failure. Laws regulating labor are feasible and just because, laborers having little power to lobby and corrupt legislatures in their behalf, such laws are the concession of humanity, while laws favoring powerful monopolies are usually the price of a bribe. Laws opposing such monopolies are too often in turn only an occasion—perhaps even a bid—for bribes in their application. Would it be strange if a person unbiased by prejudice or self-interest should conclude that private interests which have grown powerful enough to deny responsibilities and defy regulation should pass *wholly* under public control?

SUMMARY.

1. Statutes regulating industry were generally abolished early in the present century, owing to reliance on competition.
2. Legislation protecting labor was soon found necessary, however.
3. Under pure competition the least scrupulous competitor tends to impose his moral standard upon the rest.
4. Women and children especially require protective legislation.
5. Law can feasibly limit the hours and days of labor, which can otherwise be limited only by unanimous agreement.
6. Labor contracts can be somewhat, though not extensively, regulated by law.
7. Legal regulation of monopolies and trusts has been extensively tried, with most unsatisfactory results.

QUESTIONS.

1. What was relied on to regulate industry during the Middle Ages? during the first part of this century? With what result?
2. What classes have proved unable to do without legal protection? Why?
3. What kind of a competitor has the advantage under pure competition? Why?
4. What should the law aim to secure for women? for children? Why? What is the result of their extensive employment in industry?
5. How should days and hours of labor be regulated? Why? Labor contracts? Why?
6. What is the result of attempts to regulate monopolies by law? Why?

LITERATURE.

See works already cited, and
 Jevons, W. S. : *The State in its Relation to Labor.*

CHAPTER VII.

STATE MANAGEMENT OF INDUSTRY.

IN the preceding chapters we have considered the relations of government to private industry, and have discovered two connections in which our history has been a disastrous failure. These are, first, assistance in enterprises which are too great or too general in the benefits they confer to make private enterprise adequate; and, second, the regulation of private enterprises which have become so powerful and despotic as to be a menace to society. If we examine closely into those cases of corruption which we have considered we shall find one characteristic pervading all. The enterprises in question are in their nature monopolies, or they are made so by the action of government. By a monopoly is meant a business which is not limited by competition. It may consist of a single firm or of many firms bound by an agreement not to compete. If this agreement is definite and formal it is called a pool or combine; if the parties merge their separate existence in that of a single larger corporation this is called a trust. The principle is the same in any case. The monopolistic concern, the pool and the trust, all agree in this, that they charge what they please. The limitations to this principle we have already considered. But while monopoly price has a natural limit it is a limit much less favorable to the public than that set by competition. The result is that monopoly business creates increasing inequalities in the distribution of wealth and corresponding suffering on the part of the poor. Monopoly is inherently objectionable. Even if its owners are magnanimous and unselfish, which has hardly been true up to date, the centralization of the power of industry in a few hands, with its enormous resulting

wealth, is undemocratic, and makes the many dependent upon the few. Such a dependence, not of man upon society, but of society upon a despot, would be a paternalism more odious than any that a government has ever offered. The reaction against the mediæval system which we have before considered was due in no small degree to the monopolies established by royal grant, which were one of its most hateful features. The experience of all the past teaches one lesson: *private monopolies are intolerable in a free country.*

There is a group of industries which we may call natural monopolies, because they are monopolies by virtue of their own inherent properties. They are of vast importance, and the property which they own is in value a considerable proportion of the property of the United States, and, in fact, of any modern country. The monopolistic character of these enterprises can be plainly seen by reference to their chief characteristics: 1. They occupy peculiarly desirable spots or lines of land. 2. They can increase the service or commodity which they supply without a corresponding increase in capital. 3. The service or commodity which they supply must be used in connection with the plant which supplies it.

We will examine briefly these characteristics. If there is only one spot or line of land for the business it is manifest that the enterprise having the position must be a monopoly; but when there are several spots or lines of land one may be much better than another. Usually there is room for only one street-car company in a street, or one elevated railway over a street, and the company having the possession has, so far as that street is concerned at least, a complete monopoly. Often the possession of a few streets gives control of an entire section of a city, or, indeed, the whole city, so that any extension of the service must come from the company already in possession. This is, for example, very nearly the position of New York city with respect to the elevated railways. The great steam railways occupy peculiarly favored spots or lines of land to an extent which is not generally

appreciated. Of course along a considerable distance of their line duplication, so far as land is concerned, seems easy enough; but there are certain very important points at which such is not the case, as a pass through a mountain which may be very narrow. It frequently happens that a railway which passes between a mountain and a river occupies the only line which is available without enormous cost; in cities, too, a company early in the field often secures a valuable line or tract of land which cannot be duplicated. This is the case with the New York Central and Hudson River Railway, in New York city, and with the Pennsylvania system in Philadelphia, and to some extent also in Baltimore and in Washington.

The fact that the industry can be increased without a proportionate increase of capital makes it, of course, cheaper for one company to do a given amount of business than for two or more. It is on this account that monopolies have been called industries of increasing returns. To what extent economy is secured by increasing the magnitude of a business is in many branches of industry more or less open to question, but in the case of the industries under consideration it is not only cheaper to manage a business as one whole, but very much cheaper; consequently there is always an inducement held out to various companies or persons engaged in a business which is a monopoly in its own nature to effect a combination. The result of a combination is increased gains, and as the purpose for which the business is followed is gain there is a constant force contending to bring all those together who are in this business, and this force ultimately overcomes the most serious obstacles.

If the commodity could be separated from the plant furnishing it the monopoly would be far more difficult and perhaps impossible. If the German telegraph service could furnish us with telegrams in the United States, as a German manufacturing establishment can send us its products, we would of course use the German service, and in the United States often save seventy-five per cent; but telegraphic service can be only furnished where the plant is. The service which

a railway furnishes must be used in connection with the railway itself.

The monopolistic character of these enterprises is further demonstrated by experience. Competition has been tried in all these branches of business and has never been permanently successful. If we see a given experiment tried a thousand times by different persons under every conceivable circumstance and find that it never succeeds we naturally draw the conclusion that the effort is a hopeless one. This describes the situation with respect to the gas supply. It has been tried in certain cities a half a dozen times, and it is probably an underestimate to say that altogether the experiment in various countries has been tried a thousand times, and no one can point to an instance of successful permanent competition. The experiment has been tried over a hundred times in the telegraph business, but has had the same outcome, namely, monopoly. In France and England the outcome of attempted competition among railways has been monopoly, and the reason why many people in the United States still believe in the possibility of competition among railways is because the development of the railway business is not yet complete, and it is not generally appreciated to what extent the railway business is conducted even now by agreement. A striking instance was recently afforded, however, when it transpired that certain railways in the Northwest had agreed not to exceed a given rate of speed between Chicago and Minneapolis.

It is perfectly plain that monopolies cannot be left to manage themselves. What shall be done? Two answers, and only two, are possible. Such enterprises must be *regulated* by the State or they must be *owned* by the State. State regulation we have already considered at length. Its object is to secure a *safe, efficient, and inexpensive* service of the public. What has been the result? Last year 7,029 persons were killed and 33,800 injured by our railways. Such a record would appall the least civilized State of Europe. It has been claimed that it is more dangerous to be an employee on an

American railway than to be a soldier in the Prussian army in time of war. All this, too, in face of the fact that safety appliances are well known which would save nearly all of this destruction. But to adopt these would cost money. Electric wires are exceedingly dangerous and should be run underground, but companies, with few exceptions, have successfully resisted this improvement. It would cost money. It is idle to say that society does not desire these improvements. It does desire them, and our legislators desire them, but they are at the mercy of the lobby. This is a principal point under the head of safety. Is it safe to have railway lobbies in our State and national legislatures which control legislation, not only affecting railways, but legislation of every kind, and make legislators their servants? Such a despotism is a danger to society compared with which the killing of a few thousand innocent citizens each year may be held to be a small affair, serious as the latter is.

In the matter of efficiency, again, we cannot view the results of State legislation with complacency. Our railways, to be sure, where competition has not been suppressed on through lines, have in some particulars shown great enterprise; but this is in part the result of a competition now fast disappearing, not the result of State regulation which must take its place as monopoly is established; in part, also, the result of the fact that many Americans have means sufficient to enable them to pay for comforts and conveniences greater than those to which an ordinary ticket entitles the holder, and these conveniences and comforts are of special importance where distances are so great as in the United States. A considerable proportion of the lauded enterprise in American railways is seen in the provision of services and accommodations for which an extra charge is made. The telegraph, which has become fully monopolized, has persistently refused to adopt improvements which are continually introduced into the English service. This is the invariable spirit of monopoly. We hear much about destroying private initiative and individual incentive. *Private enterprise when it becomes*

monopolistic ceases to be enterprising, and cannot be made so by regulation.

It is in the matter of expense that our judgment of regulated private monopoly must be most severe. Our telegraph service costs twice what it ought, and is, of course, less patronized and less serviceable for that reason. Our railway rates are needlessly high, according to the confession of prominent railway officials. Our municipal street-car service is a scandal and an oppression. Why do we not regulate prices as they should be? Because government is "influenced," and the continuance of private monopolies will make this "influence" ever more powerful and subtle. Added to all this overcharge there is the enormous waste of millions of capital, which has been sunk, and is still being sunk, in efforts at hopeless competition, which has been a favorite means of "regulating" monopoly.

The other resource is State ownership and direct management. The applications of this principle are numerous in Europe and are increasing rapidly in America. In most countries in Europe the State owns the railways and all own the telegraph.

Our cities long ago discovered that the water supply was so essential that it could not be intrusted to private enterprise, and while private ownership of water works is not unknown it is distinctly a discarded policy.* Municipal ownership of lighting plants is rapidly increasing, and municipal ownership of street railways has begun. What are the results of this policy? It must be remembered that we are comparing a young policy with an old one, and that a policy in the experimental stage is usually more expensive than in that of full development. We must consider, again, the three points of safety, efficiency, and expense.

The Prussian railway statistics show that in 1888-89 one sixth as many persons were killed and one thirteenth as many

* Irrigation works are indispensable in many parts of the United States, and it is especially important that they should be public property. To intrust them to private enterprises is to disregard the teachings of history.

injured in proportion to the number of passengers as in the United States. It has been objected that the average passenger in the United States travels much farther than in Prussia, and so the chances of accident are increased ; but, on the other hand, it must be remembered that the population in Prussia is much denser, and that the number of crossings per mile and possible casualties is therefore much greater. The greater safety is due simply to greater care, which characterizes all branches of State industrial activity. The reason is clear: the private owner naturally considers *immediate* interests ; the State, from its greater perpetuity, is less concerned in an immediate advantage ; the individual, again, has little interest in the general safety ; this, however, profoundly interests the State.*

Under the head of safety must also be considered the relation of these great enterprises to social order. The obviously unfriendly relations between these corporations and their numerous and well-organized employees is a constant menace to the order of society. Strikes suspend traffic vital to public interest, and when prolonged and bitter, result in riots and train wrecking, imperiling the most important interests. Under State management such dangers are minimized. Government employees do not strike or use dynamite. They are usually reasonably though not exorbitantly paid, and are not irritated by excessive toil, by oppressive conditions of service, or by the thought that unreasonable incomes are accruing, through their efforts, to private individuals.

The question of efficiency is a much more disputed one. We are told that government enterprise is wasteful and unenterprising, and that private enterprise under the spur of

* Were not space too limited the many devices to insure safety of railway passengers in Prussia would be described. Some of them are quite unknown in the United States. Probably no observant traveler in that State fails to notice the great ingenuity displayed in securing safety. That greater regard for human life is displayed by government than by private corporations is unquestionable, and, although little discussed, is one of the weightier considerations in the controversy of public *versus* private enterprise.

competition is the condition of efficiency. We have seen that in the cases under consideration competition is but partial and temporary, and that where it is absent private enterprise regularly takes as much and gives as little as it can. But, on the other hand, experience does not seem to bear out the charge made against government enterprise. The Prussian railways have constantly and rapidly improved their service since they were purchased by the government. It is claimed that on the whole trains are run faster and that fewer changes of cars are required for holders of ordinary first or second class tickets than on American railways, and this seems to be substantiated by a comparison of time-tables in the two countries, with the added advantage that the Prussian trains are on time, as ours frequently are not. Of course German railways, either under private or public control, will show German peculiarities, and the main question is whether, take it all in all, improvement has been as great under government as could have been anticipated under private enterprise. There seems room for little doubt on this point.

Our post office is a more efficient service by far than any private service in the country. It must be remembered in such comparisons that any private company charged with such service would cut off many routes which, in themselves, do not pay, and would be exceedingly loath to extend or improve the non-paying but important parts of the service. Compare the routes chosen by express companies with those followed by our postal service. The individual initiative which is so much urged in favor of private enterprise seems to have been far less active in the introduction of improvements in the case of express companies than in that of the post office. The management of municipal service in the lighting, etc., has proved more efficient than that of private companies, if we may judge from the testimony of those cities which have tried both methods and have almost, if not quite, uniformly preferred public ownership. This argument is made more conclusive when we consider the situation in which a managing official is placed. Under private manage-

ment he is expected to make the largest possible amount of money for the stockholders; in the other case he must secure the most satisfactory service for the public. Which system will naturally defer most to public demands? As a matter of fact, *the prejudice against government management comes largely from experience with mixed enterprises, not with public enterprises.*

In the matter of expense we can consider only certain cases where both systems have been tried and made comparisons possible. This we find especially in municipal service. In nearly every case on record in which the two systems have been successively tried there has been a saving of expense under public ownership, sometimes a very great saving, and that, too, without reduced efficiency. More often, especially in the case of electric lighting plants, municipal ownership has been tried at the outset, and comparisons made with towns similarly situated show an almost invariable advantage, usually very great, in favor of the city plants. It is astonishing how cheaply these services can be rendered when the issue of fictitious stock is prevented and profits are paid only on cost. A committee in Haverhill, Mass., report that in that State 62 cities having electric light plants under private ownership pay on an average \$105.13 per year for each lamp of 2,000 candle power. In the same State 14 cities operate plants of their own at \$55.12 per lamp. In 1892 Kansas City paid \$200 per light; Rutland, Vt., paid \$280; San Francisco, \$440.67. Many private companies, of course, work more reasonably. *Brown's Directory of American Gas Companies* for 1892 reports 224 companies which furnish lamps at an average cost of \$102.40, while 39 cities widely distributed (all from which returns could be obtained) furnished their own lamps at an average cost, *including interest, taxes, and depreciation*, of \$77.68. The lamps in the former case burned on an average 6.84 hours, and the latter, 7.9 hours per night. Allowing for this difference, public lighting secured a saving of over thirty per cent as compared with private lighting.

Where railways have become public property not only facilities have been improved, but rates have been reduced and revenues retained. In some cases reduced rates have resulted in large increase of revenues, as in Hungary.

It is sometimes said that this country will never consent to raise by taxation the enormous sum necessary to buy the railways. No taxes are needed. If the government can secure the money at three per cent while railways pay six per cent or more the railways bought on credit would pay for themselves in less than a generation. Much the same would be true of the other monopolies we have considered. Very often, too, it is urged that public enterprise of this sort is contrary to the traditions of our government, which, it is asserted, was founded on the principle of unmolested private enterprise. But why was it so founded? Simply because there were then no monopolies, no collective and non-competitive services where private ownership was dangerous and public ownership a necessary safeguard. Enterprises such as then existed were *naturally* private. How were houses supplied with water and light? How were goods transported? And yet there was one collective service, the post office. Why was that not made private property?

It is in harmony with the principles of our institutions that there is a rapidly developing sentiment in favor of public ownership of those enterprises which from their nature cannot be subject to competition. These become more numerous and important and more dangerous in private hands as civilization advances. *Public industry in the monopolistic and private industry in the competitive field seems to be the only feasible or natural law.*

Forestry.—There are some other enterprises which, for various reasons, it is desirable that government should assume. In different countries the State is furnishing insurance of various kinds, and that successfully. Strong arguments, based both upon the nature of the industry and actual experience, can be adduced for the assumption of in-

insurance by the State. The limited space of the present book will allow us, however, to discuss in this chapter only one of these other industries, and that one which has immediate practical importance in the United States, namely, forestry.

All governments are taking upon themselves the ownership and management of forests, but for reasons of a different nature from those which lead to ownership and management of businesses which are monopolistic. New York State has acquired forests in the Adirondacks and has entered upon forestry, having in her employ foresters. Bills have been brought before Congress which look to management of forests as a permanent function of our national government. Switzerland, France, and Germany are increasing the area of governmental forests. The reasons are very obvious when the conditions of successful forestry are examined. First of all, it may be said that rational forestry requires plans to be made for one hundred and twenty years in advance. Trees must be planted to be felled at the expiration of that long period, for it takes that length of time for them to grow to their full size, and when they are allowed to grow to full size the amount of timber needed can be grown on the smallest amount of land. Private individuals will not, however, invest money from which they expect to receive no return for over a century. Second, forests ought to be cultivated on a vast scale on land especially adapted for forests—land often good for nothing else—and certain great regions, like steep mountain sides and sources of streams, ought to be entirely covered with forests. Their climatic influences are generally believed to be important, and forests with their leaves and undergrowth certainly prevent rainfall from rapidly rushing down mountain sides and deluging the country below. Forests prevent a waste of soil. It is said that where forests have been rashly removed from mountain sides in Baden, Germany, and in Switzerland it will take three hundred years to repair the damage. Soil must be slowly formed again. Private individuals will not select for forestry vast tracts of land properly situated. In America farmers

have quite generally kept a few isolated acres in woodland, but this is not what is wanted. Very likely the land kept in trees is better adapted for something else, and forests may not be needed at this particular point. Third, it requires highly trained scientific men to take care of a forest. It is necessary to go through high schools, to follow a course for several years in a forestry academy, and then to supplement this by an apprenticeship of several years in practical work in forests. Only a State owning tens of thousands or hundreds of thousands of acres can train and organize a properly qualified body of scientific foresters. The difference between a forest which grows up wild and one which is developed under a proper system of culture is so great that the trained eye can detect the difference nearly as far as sight can reach, and it is probably safe to say that it takes twice as much land to supply a given need when forests grow up of themselves as where a rational system of forest culture obtains. Fourth, when forests are cultivated in large tracts, as they should be, covering perhaps an entire mountain, very considerable quantities of game can be grown, and this forms an important element in the food of a people. Our private system of forests in America results in an almost total destruction of game in the settled parts of the country. Fifth, although forests do not pay private individuals, the profits of Belgian forests, for example, not exceeding, it is said, one per cent on their selling value, they do pay the people as a whole, on account of their general beneficial effects.

More might be said on this topic were not space too limited. It is manifest from this that petty measures which some of our States are introducing, like tax exemption for planting a few trees or covering even a few acres with trees, will never accomplish anything of economic significance. Even "arbor days" are of little account save for their educational value. On that account, and on that account alone, unless it be perhaps for the sake of another holiday, they should be encouraged.

SUMMARY.

1. Private monopolies are inherently objectionable and are intolerable in a free country.
2. A business which controls a peculiarly desirable location, which can increase its service without corresponding cost, and which supplies a service available only in connection with its plant, is inherently a monopoly.
3. Railways, gas works, etc., have proved incapable of control by competition.
4. Under private ownership they have not secured the maximum of safety, efficiency, or economy.
5. Private enterprise when it becomes monopolistic ceases to be enterprising, and cannot be made so by regulation.
6. Public management of railways in some countries, and of municipal monopolies in American cities, has proved more satisfactory in all respects.

QUESTIONS.

1. Why are private monopolies objectionable?
2. What is a monopoly? What conditions are necessary to constitute a monopoly? What industries especially present these conditions?
3. What has been the result of private ownership in these industries as regards safety? efficiency? economy?
4. What has been the result of public ownership in each case? Where has it been tried?
5. What is the necessary condition of enterprise under private ownership?
6. What is the proper field of private enterprise? of public enterprise?
7. What special reasons exist for government forestry?

LITERATURE.

Works already cited, and

Adams, H. C.: *Relation of the State to Industrial Action.*

CHAPTER VIII.

SOCIALISM.

The Elements of Socialism.—Those who desire industrial democracy—not prematurely, but in its own time—are many, and they include perhaps most of the best economists. There are, however, different ways by which it is proposed to attain the desired goal. One of these ways is voluntary coöperation for all competitive pursuits and governmental activity for monopolistic undertakings. Another one of these ways is called socialism. Socialism means coercive coöperation, not merely for undertakings of a monopolistic nature, but for all productive enterprises. Socialists seek the establishment of industrial democracy through the instrumentality of the State, which they hold to be the only way whereby it can be attained. Socialism contemplates an expansion of the business functions of government until all business is absorbed. All business is then to be regulated by the people in their organic capacity, each man and each woman having the same rights which any other man or any other woman has. Our political organization is to become an economic industrial organization. Private property in profit-producing capital and rent-producing land is to be abolished, and private property in income is to be retained, but with this restriction, that it shall not be employed in productive enterprises. What is desired, then, is not, as is supposed by the uninformed, a division of property, but a concentration of property. The socialists do not complain because productive property is too much concentrated, but because it is not sufficiently so.

There are four elements in socialism, namely, first, the common ownership of the means of production; second, the

common management of these means of production ; third, the distribution of annual products of industry by common authority ; fourth, private property in the greater portion of income. Socialists make no war on capital, strictly speaking. What socialists object to is the private capitalist. They desire to nationalize capital and to abolish capitalists as a distinct class by making everybody, as a member of the community, a capitalist ; that is, a partial owner of all the capital in the country.

Socialists say that labor creates all wealth. No rational socialist means thereby to deny that land and capital are factors of production, but as they are passive factors they hold that their owners ought not to receive a share of the product unless they personally are useful members of the community. Labor is the active factor, and all production is carried on for the sake of man. Land and capital are simply the tools of man. Socialists admit that the owners of these tools must receive a return for them when industry is organized as it is now ; hence they desire that these tools should become common property. They wish to make of universal application the command of the apostle Paul, "If a man will not work, neither let him eat."

Distributive Justice.—The central aim of socialism, the pivotal point, is distributive justice. It proposes to distribute products justly. The ideas of socialists are, however, not harmonious as to what constitutes justice. Some say equality is justice ; others, distribution in proportion to real needs, so that each may have the economic means for his completest development. Still others say justice means distribution in proportion to merit or service rendered, but the service of the individual, not of his ancestors. Bequest and inheritance, except of articles of enjoyment, like pictures, old family plate, books, household furniture, possibly also the use of a house as a home, must be abolished. Socialism allows no inheritance which renders labor needless.

Socialism an Extension of Existing Institutions.—Our government owns the post office ; most governments own

the telegraph. Nearly all own the wagon roads. Some own the canals and railways. Many governments own factories. Probably every national government does at least a little manufacturing. Most governments cultivate forests, and some cultivate more or less arable land. We have only to imagine an extension of what already exists until government cultivates all land, manufactures all goods, conducts all exchanges, and carries on, in short, every productive enterprise, and we have socialism pure and simple.

At the present time we have private property in nearly all the income of society, or the national dividend, as it is called. But some things are used in common, and afford what may be called a common income. Public parks, public schools, public galleries, and the like are of this character. Private property in income would continue under socialism, and there would be provision of private property for everyone, so that in this respect socialism emphasizes and extends the idea of private property. On the other hand, socialism would naturally continue and intensify the tendency to enjoy things in common. This is what is meant by saying that socialism signifies private property in the greater proportion but not all of income.

The Strength of Socialism.—Socialism makes perhaps its strongest claim in its plea, first, for a scientific organization of the productive forces of society, and, second, for a just distribution of annual social income. It is said that the present production of economic goods is small in proportion to population, but socialism replies: "Naturally enough. Competition is wasteful. Two railways are built where one would suffice. Two trains run parallel between two cities where one would serve the public equally well. Three times as many milk wagons, horses, and drivers are required to serve the people with milk as would suffice if the milk business were organized like the mail distribution business in cities. Look at the shops, wholesale and retail, and see the waste of human force! Without competition the whole dry goods and grocery business could be carried on with a third

of the present economic expenditure of force. Reflect on all the idle classes in modern society. Socialism would set everybody to work, and, making each one dependent on his own exertions for success, would stimulate all energies." The argument is continued after that fashion, and it is a telling one. It does not prove the point unless we grant two things: first, that, the present waste and idleness cannot be suppressed or greatly diminished without a departure from the fundamental principles of our present industrial order; second, that socialism is practicable.

Justice is a strong plea in the program of socialism, and it cannot be for one moment claimed that each one's income is at present in proportion to his services to humanity. Income in proportion to industrial merit is attractive to an ethical sentiment. But cannot we approximate more nearly to that than at present by social reform? And by social reform is meant the improvement of existing institutions, but not their abandonment. No doubt the idle man is morally a thief. He receives, but gives nothing in return. Any man who by past services of his own has not earned the right of repose is a shameless cumberer of the earth, unless, indeed, he is physically or mentally incapacitated for useful employment. Would the world suffer if you should die? That is the test. If you merely clip coupons, then no one would miss you. Others would willingly relieve you. But your service need not be manual toil.

Dr. James Fraser, the late Bishop of Manchester, England, recognized the obligations of personal service, but he did not in consequence favor socialism. He argued in this wise: "Most of us are by our necessities obliged to render services to our fellows. Some of us, however, have inherited or received money in some way without a return on our part. We are placed by God on our honor. It is now a matter, not of physical compulsion, but of honor with us to serve our fellows."* What is here said would apply, of course, not merely

* These are not the bishop's exact words. It has been many years since the author has read them, but he has reproduced the idea.

to those who receive wealth by inheritance, but to those who become wealthy by the discovery of valuable treasures, like oil, natural gas, gold, minerals, etc., on or under soil, which they own, or by the mere growth of cities, which adds immensely to the value of land. Legally the wealth is mine, but morally it is simply a new opportunity for me to help forward the progress of humanity ; for ethically I myself am not my own.

Social Reform.—We may likewise inquire whether without a departure from the institution of private property the laws of bequest and inheritance may not be so changed as to bring about a fairer distribution of products ; whether, also, by public ownership and management of natural monopolies much of the waste of present private competition may not be avoided. These and a multitude of other questions suggest themselves. Social reform seems likely to accomplish more valuable results than socialism. What is needed is a free and peaceful evolution of industrial institutions, but not a radical departure from fundamental institutions.

The Weakness of Socialism.—It does not appear clear to the author how socialism could be made to work in actual life. The danger to freedom seems a very real one. It is frankly admitted that up to a certain point there is a tendency on the part of government to improve as its functions increase. But would this hold with the indefinite extension of the sphere of government ? Let us admit that as our livelihood would depend on the efficiency of government all the force and energy which now go into private service would be turned into public channels. But what would happen if, in spite of all precautions, some unscrupulous combination should secure the control of government ? There would be no standing-ground for effective opposition outside of government, for dismissal from the service of government would mean a cessation of opportunity to gain a livelihood. If all production is to be carried on by public authority there could be no private press for criticism ; and it is to be feared that

unwelcome views, which after all may be the true ones, would fare much worse than at present.

The domination of a single industrial principle is also dangerous to civilization. It has been held that the domination of a single social principle has led to the downfall of older civilizations, and a distinguished American * has expressed the fear that the private business principle, with what naturally goes with it, called by this scholar "mercantilism," threatens American civilization. Now what is wanted is a coördination of the two principles, the principle of public business and that of private business. It is desirable that some should serve the public in an official capacity. Some are adapted for that. It is desirable that an ample field should be left for those who prefer private initiative and activity. Thus only will our civilization be rendered rich and full.

Character of Socialists.—Socialism has rendered good service by calling attention to social problems, by forcing us to reflect on the condition of the less fortunate classes, by quickening our consciences; also by helping us to form the habit, acquired by few as yet, of looking at all questions from the standpoint of the public welfare and not merely of individual gain; finally, by calling our attention to the nature of the industrial functions of government and helping us to separate rationally the private industrial sphere from the public industrial sphere. Socialism as a theory of society cannot, of course, be regarded as in any sense morally blameworthy. It has been advocated by good men and by bad men also. To-day it numbers earnest Christians and sincere ministers of the Gospel among its adherents. As there are good republicans and bad republicans, there are good socialists and bad socialists. If every time a republican was guilty of a criminal act all the newspapers said, "That is what comes of being a republican," we might begin to think all republicans bad men. It is a mistake to suppose that socialists belong to the criminal classes. Those who have worked

* Hon. A. D. White, ex-President of Cornell University, in an excellent address entitled "The Message of the Nineteenth Century to the Twentieth."

among the criminal classes and carefully studied them will tell us that almost no socialists are found among them. At the same time it must be said that the socialists have been most unfortunate in a large proportion of their public representatives, especially of their noisiest representatives, who have secured the largest amount of attention. Some of them have been vicious men, and many of them have been bitter and vindictive. Needless animosity has been aroused and class hatred nourished. The cause of progress has thus been seriously injured. Furthermore, a number of questions having no connection with socialism have been, even by socialists, not infrequently associated with it. Infidelity and free love may be mentioned. Of course these have nothing to do with socialism. Socialism has done harm on account of the manner in which it has been too frequently presented, and it has also accomplished good, but the best effects of socialism have been its indirect and not its direct consequences.

Anarchism.—In contrast with the socialists there are those who hold that if all government were abolished men would freely and spontaneously form coöperative groups which, federated, would manage all production. These men attack government and deny the moral right of man through government to exercise authority over his fellows. These are the anarchists, sometimes called anarchist-socialists. The writer frankly confesses his inability even to imagine how this kind of socialism could be made to work in actual life.

Communism is an older term not now often used. It has been employed in the past to designate an extreme kind of socialism. Some writers have called violent schemes of radical social reform communistic, and reserved the term socialistic for the more conservative plans of reconstruction. All the existing communistic societies in the United States are, however, composed of peace men, who do not believe in war but in non-resistance. It is, perhaps, as well to abandon the attempt to make a distinction between communism and socialism, and to drop the word communism. Collectivism is often used as a synonym for socialism, particularly in France.

SUMMARY.

1. Socialism is coercive coöperation in all industrial enterprises.
2. Socialists admit private property in income but not in means of production.
3. Socialists claim that labor produces all wealth, and they aim at a distribution based on justice.
4. Socialism is but an extension of existing institutions.
5. The strength of socialism lies in its proposed saving of waste and its juster distribution.
6. Its weakness lies in its almost impossible requirements of virtue and the absolute dependence of all upon this.
7. Anarchism is the opposite of socialism, a belief in the needlessness of government.
8. Communism is a vague and nearly obsolete synonym for socialism.

QUESTIONS.

1. Define socialism, communism, anarchism.
2. What is the attitude of socialism toward private property?
3. What effect would successful socialism have on production? on distribution?
4. What difficulties are in the way of the attainment of the socialistic ideal?
5. What is the character of socialists?
6. What socialistic features now exist in our government? Do they increase or diminish?
7. What is the origin of wealth according to socialists? Are they correct?
8. Why is anarchism unfeasible?

LITERATURE.

- Bellamy, E.: *Looking Backward*.
 Marx, Karl: *Capital*.
 Grönlund, L.: *Coöperative Commonwealth*.
 Schæefle, A.: *The Quintessence of Socialism*.
 Laveleye, E. de: *Socialism of To-day*.
 Rae, J.: *Contemporary Socialism*.
 Browne, T. E.: *Studies in Modern Socialism and the Labor Problem*.
 Kirkup, T.: *Inquiry into Socialism*.
 Ely, R. T.: *French and German Socialism; Labor Movement in America*.

PART II.

PUBLIC EXPENDITURE.

CHAPTER I.

INTRODUCTORY.

IN Part I we considered the relation of the State to the productive activities of society. We now come to a part of our work which is usually called public finance. By *public finance* we understand that part of economics which deals with the acquisition of the public revenues, their management, and their expenditure. The remainder of the present book deals with what we may in a broad sense call public finance, although other than purely financial considerations enter into our treatment.

Investment and Expenditure.—As a result of what has gone before, we have reached the conclusion that as a rule private enterprise should manage the various competitive industries, but that industries not subject to competition are best managed by the State. In the management of such enterprises the State will necessarily invest immense amounts of capital, but these transactions do not come under the head of public expenditure as the term is here used. When we lend money we do not call it spent, nor yet when we use it to buy productive property. Such uses are investments, not expenditures. By an investment we mean any outlay of capital which returns a direct income equal to current interest. An expenditure is an outlay which yields an indirect income only, or is for the purpose of satisfying wants directly.

Any public enterprise may be managed either as an invest-

ment or as an expenditure. If the service rendered is sold to the individual consumer at a price which covers cost and affords a reasonable profit it is an investment. If the service is furnished free and the expense paid by taxation or other revenue it is an expenditure. Still a third method is to combine the two, furnishing the service, not free, but at less than cost. State railways and municipal lighting plants are examples of investments. The public roads are examples of expenditure. The post office is a combination of both. We do not here include the entire outlay for the postal service under expenditures, but only the deficit which is annually covered by an appropriation. On the other hand, if a public investment yields a surplus it is classed as revenue.

Whether an enterprise should be managed as an investment or an expenditure, or both, is purely a question of its nature and the result to the general welfare. If it is something which men need to be encouraged to use it should be made cheap without regard to cost. If it is something the use of which needs restraint it should be made dear equally without regard to cost. For example, it would be possible to charge an admission fee for entrance to the public parks, but such an effort to make the parks pay for their maintenance would simply keep people out of them, and especially those who most need to frequent them. Here is a case where people need to be encouraged to use a public service, and consequently no charge is made for it. The postal service is another case where encouragement is needed and restraint as well. Ease of communication is highly important, but no one can doubt that if no charge were made the mails would be unprofitably used and waste incurred. Our own government has thought best to put the charge low without removing it and to meet a small part of the outlay by expenditure.

Water is a similar case. Its use needs encouragement, but to furnish it free would result in wasteful use. A small charge usually makes people more saving. Municipal lighting is usually made to pay cost, and often a considerable revenue. The same is true of street cars. As an extreme

example of the investment principle may be mentioned State monopolies of intoxicating liquors and tobacco. Where such monopolies exist prices are put far above cost, as the use of these articles requires strong discouragement. In every industry a point will be found where the service will confer a maximum benefit upon society, and here the price should be fixed, no matter what the cost. Roads, harbors, lighthouses, schools cost much money, but it is very generally held that they should be free. It costs but little to carry a letter, but everyone believes that the sender should pay something for it.

Increase of Public Expenditure.—There is a distinct tendency in highly civilized societies to increase public expenditure. The expenditures of England increased forty-six times between 1685 and 1841, while the population only trebled. The French budget in 1828 reached the sum of a thousand million francs, and people were alarmed. Since then it has passed three thousand millions, and including local expenditure, four thousand millions. The State taxes of Ohio increased forty-six times in sixty years, and local taxes over one hundred times. The expenditures of the federal government are shown in the following table :

Years.	Civil Establishment.	Total Expenditures less interest on the debt.	Net ordinary Total Expenditure includ- ing interest, but not bond purchases.
1685.....	\$3,676,053	\$12,296,041	\$16,394,842
1841.....	5,645,184	20,650,108	23,483,560
1860.....	27,977,978	60,056,754	63,200,875
1887.....	85,264,825	220,190,608	287,932,180
1892.....	99,841,987	321,645,214	345,023,331

The first impression one receives from such facts is one of alarm, and there are many people who see in this a sign of demoralization. But we must examine carefully these facts before we reach a conclusion as to their meaning. Increased expenditure on the part of government may mean either increased *costliness* of service or increased *amount* of service. The prejudice against government expenditures arises from a confusion of these two things. If the State does no more

for us than formerly, and yet spends more of our wealth in doing it, then indeed there is reason for complaint and alarm, as there is also if expenditures exceed capacity and bankruptcy or repudiation threatens us. But if government doubles its expenditures and at the same time trebles its service to us we have reason for satisfaction. It is not possible for us to enter into an exhaustive examination of this question, but there is abundant evidence that the service of government has been improved in extent and in quality enormously during this period of increased outlay. Compare our postal service or our educational system with that of fifty or a hundred years ago. When was ever a letter carried so far, so quickly, or so cheaply as now? When have equal educational advantages ever been had at so low a price as now?

Public and Private Expenditure.—We must not forget that wealth is to be consumed with a view to the satisfaction of human wants. An increase of expenditure is a good thing if the increase is wisely spent. This brings us to the question which is vital to our whole subject. Do we get more from public or from private expenditure? On this point we have long been in the habit of feeling rather than thinking. We dislike to pay taxes. The things which taxes buy we do not carry home in our pockets or have “all to ourselves,” and we feel as if taxes were so much pure loss. Of course we know better, but we act as if we did not. It behooves us to think very carefully on this point, for some of the most momentous problems of our day are here involved. Let us notice the principal differences between public and private expenditure.

Public Expenditure is Inclusive, Private Expenditure Exclusive.—A private citizen buys a beautiful painting for ten thousand dollars and puts it in his house, where he and a few friends can see it. Perhaps a thousand people see it in a year. The same picture in a public gallery is seen by all who wish, say a hundred thousand persons per year. Where does it do the most good? Or look at it from another standpoint. Suppose interest, insurance, etc., amount to ten per

cent. It costs the owner a thousand dollars to keep a picture, or a dollar for each person who sees it, while in a public gallery the expense is one cent each. The wealthy owner who pays ten thousand dollars for the picture could see it as often as he liked in the public gallery by paying a single extra dollar in taxes. If it be right for a wealthy man thus to imprison a world treasure away from the public one thing is sure, that system is better which puts things where they will do the most good. But our picture problem brings us to another difference between private and public expenditure.

Public Expenditure is Cumulative in its Results.—Suppose the hundred thousand people who visit our art gallery have an average of a dollar apiece to spend on art. What can each one buy? A cheap chromo or engraving. But suppose they combine. They can buy an immortal work of art. Let a hundred thousand people spend a dollar apiece in beautifying their front yards and the result will scarce be noticed. Let them combine and they can create a park which will change the aspect of the place and increase the value of property far more than it has cost. Nor is it alone in art and nature that this cumulative value of public service appears. In Baltimore the mediæval custom prevails of compelling each man to sweep the street in front of his own house. It costs many times what public service would cost, and is not half as efficient. The meaning of our enlarging public expenditures is simply this, that year after year we discover new methods of associated economy or a new service. Of course we must remember that many services gain nothing by consolidation, and such should and do remain private; but the great gains of a higher civilization are precisely of this kind which are impossible without vast coördinated resources. These are by far the most profitable expenditures we can make. A dollar spent in wisely used taxes brings to the citizen sometimes ten, sometimes a hundred times as much as if spent in any other way.

Opposition to Public Expenditures.—It is urged that government spends unwisely, but how about the average cit-

izen ? Does not the average competency of the State in countries like England, Germany, and the United States to spend wisely, even allowing for dishonesty, exceed that of the average individual ? Where do we see more absurd "financiering" than that of private individuals, even judged by their own standard of interests ? *

The second reason why people oppose public expenditure is ignorance. The public expenditures which offer such immense benefits are, on the whole, new developments. To be sure, cases like Athens may be cited in the past, where in the days of Pericles one third of the public revenues was expended in art, resulting in a public education which it has been claimed made an Athenian gamin more of an artist than many a modern man of learning ; but such cases are exceptions. Our modern civilization has an immensely broader ideal than that of Athens. We seek not merely art, but comfort, health, security, virtue, intelligent citizenship, culture, education, and, in short, everything that makes for human well-being, and that not only for a relatively few citizens with an excluded mass of slaves, but for all. No such attempt was made in the past by public or associated action, and no such end was attained save by a small number who made it a point to monopolize their advantages.

The third reason for popular prejudice is a false conception of the character of government. We are but recently become familiar with the fraternal State. Of old the State centered in the ruler, and too often his theory of government was that of Louis XIV, "I am the State." The people were not citizens, but subjects, and existed for the sake of the ruling class. A large part of public expenditure, under such circumstances, was a loss to the people. When taxes were increased it meant too often another palace for the king, or more banquets and wasteful luxury. Subjects

* Much is said about dishonest transactions in government, but how about transactions in our Stock Exchange ? The average congressman is as honest as the average merchant would be if obliged to manage monopolies and "regulate" unscrupulous private despotisms.

have become citizens and rulers, and with all recognition of the weakness and corruption of government there is little room for doubt that public expenditures are more general in their benefits than private expenditures. When we consider their inclusiveness and their immense cumulative power we are tempted to draw this conclusion: *If government is as honest and competent as the society it represents, the greater the proportion of public to private expenditure which can be permanently maintained, the better.*

Probably most readers will feel that some qualifications are required, even if they do not at once know what they are. We must acknowledge that the above is a high ideal. It requires close examination of accounts and great watchfulness to intrust large consumption to the public. Unbridled public extravagance and loose financial methods can soon ruin a great commonwealth, whereas the damage of private prodigality is more restricted. The dread of large expenditures in the United States rests in part on waste and fraud in public finance in the past.

Another qualification is suggested by the danger that very large taxation may paralyze private industry. Thus we say that not more must be taken than can be permanently taken, which means that we must not begin an exhaustion of our sources of supply. We can also add that we cannot take more than the state of public opinion at the moment will tolerate.

Still another qualification occurs when we remember that if wealth is wasted in private hands it is sometimes in such hands expended with greater wisdom than could be anticipated from public authorities. It is the function of wise and strong men to go before the mass of men and to illuminate the path of progress with their superior insight. It would be a great loss were there no surplus wealth in private hands to be used for public purposes.

Finally, the fact cannot be overlooked that many things need to be done which the general public cannot be persuaded to undertake. It remains, therefore, for private parties to do these things, or they must be entirely neglected.

SUMMARY.

1. Expenditure differs from investment in that it is not directly productive of revenue.
2. The same enterprise may be managed by the State as an investment or as an expenditure, according to the object to be attained.
3. The great modern increase in public expenditures is to be judged, not simply by its amount, but by its productiveness.
4. Public expenditure is inclusive, private expenditure exclusive.
5. Public expenditure is cumulative in its results.
6. Opposition to public expenditure is due to distrust of government, ignorance of modern developments, and false conceptions of the character of government.
7. With healthy government increase of public expenditure means progress, but this principle is subject to important limitations due to circumstances.

QUESTIONS.

1. Define expenditure ; investment. What determines the basis on which a given public enterprise shall be conducted ? Illustrate.
2. What is the tendency of public expenditure as regards increase ? What possible explanation of this tendency may be offered ? Under what conditions would either be correct ?
3. What will justify an increase of expenditure ? What are the natural limits of such increase ?
4. What are the advantages of public over private expenditure ? Are these true of all industrial fields ?
5. What are the objections to public expenditure ? How far are they justifiable ? How are they to be accounted for ?
6. What is the law of increase of public expenditure ? its limitations ?

LITERATURE.

Marshall, A.: *Economics of Industry.*

Adams, H. C.: *The Relation of the State to Industrial Action ; Public Debts*

Ely, R. T.: *Problems of To-day.*

Bastable, C. F.: *Public Finance.*

CHAPTER II.

EXPENDITURES FOR SECURITY.

HAVING considered the general principle of public expenditures, it now remains for us to notice some of its varieties and consider their relative claims.

National Defense.—Under this head is included the cost of army and navy. If we leave for a moment our own country, which enjoys exceptional immunities from attack, and consider Europe, we shall find that we are in the presence of the most serious item of the national budget. The six great powers of Europe spent in 1888 nearly nine hundred millions of dollars for this purpose. Moreover, the expense is constantly increasing. From 1868 to 1888 the increase for the same nations was about seventy-three per cent, not counting expenses of actual war or interest on debts incurred. This increase is due in part to the more extended scale on which military defense is now conducted, and also to new inventions which constantly make old armaments worthless and require new outlays. Of course, if we were calculating the cost of war as a whole we should have to add the immense loss of keeping hundreds of thousands of men in enforced idleness, and then the destruction of life and property during actual war. This indirect cost of war, while of immense importance to economic interests, is one which we can but allude to here. The direct expenditure for war, however, we must consider more carefully.

In the first place, we must not forget that this outlay has some economic advantages. We in America are apt to commiserate Europe unduly on her outlays for defense. It must not be forgotten that the men who compose the army derive immense benefit from the discipline to which they are sub-

jected. This makes them better producers as well as better soldiers; in short, it makes men of them to a considerable degree. This fact, which is keenly appreciated by intelligent Europeans, is neglected by us. Moreover, a certain part of the army is, of course, composed of persons who are naturally not a help but a burden, perhaps a positive danger, to society.

Whatever may be the ultimate cost of national defense, it is demanded on economic grounds if no others. A sense of security and stability is indispensable to economic prosperity, and is worth all it costs. And yet if due care is taken we may expect a lessened need of military and naval expenditure, and while we should avoid "slothful overtrust" we should rely so far as possible upon peaceful guarantees.

The United States is peculiar in the emphasis it lays upon a form of military expenditure which cuts but a small figure in European budgets, namely, pensions for past services in the army. General Garfield, when a member of Congress, favored a pension bill which appropriated the enormous sum of thirty-five millions for pensions. He claimed that the appropriation would never pass this amount, and that through the death of the pensioners the amount would steadily diminish. Since then the appropriation has been quadrupled, and now equals or exceeds the direct cost of the most powerful standing army in the world. It is not in any sense a military necessity as regards either present or future. Immense resources which might be expended by the State with incalculable advantage are thus distributed among vast numbers of dissociated and to some considerable extent incompetent spenders who for the most part simply "use it up." A judicious public use of the same resources would confer equal benefit upon the pensioners themselves, and a like benefit upon all the community, but it would not influence so many votes.

Internal Security.—Under expenditures for internal security are included the cost of our police system in all its branches—including constables, sheriffs, etc.—and that of our judiciary system, since both of these are occupied almost

wholly in securing person or property from injury. This expense varies greatly according to circumstances. Among primitive peoples, and, indeed, until civilization has made some progress, nothing like a modern police *system* is known. Individuals protect their own property and persons, the right of vengeance being recognized and constituting a system of summary justice in charge of private enterprise. The increase of expense in this connection therefore marks at first a new branch of public enterprise, later a more perfect performance of this function, and closely allied to this a more humane treatment of offenders. When more than two hundred offenses were punishable by death the cost of dealing with a criminal was slight. Now for most crimes he is subjected to a long imprisonment, which becomes more expensive as increased efforts are made for his reformation. When we remember how largely society as a whole is responsible for the existence of crime and how great is the injustice necessarily involved in its punishment, as well as the gain even in economic resources from the reformation of the criminal, there is no expenditure which we ought to make more willingly than that for the reformation of criminals.

Another cause of increased expenditure is the increase of wealth and of the temptations which it excites. New interests require new safeguards and suffer increasingly from criminal interference. Not only are social relations more delicate than formerly, but means of injury are much more potent. The invention of dynamite necessitates precautions once unthought of.

For these and other reasons the expenditure for this purpose has rapidly increased. In France the increase from 1822 to 1890 was over one hundred per cent, while in England from 1825 to 1890 it was over three thousand per cent. This means, not that England is growing more criminal than France, but that she is caring for more interests and caring for them more humanely than her neighbor.

Here, too, we ought to expect an ultimate diminution of expenditure, but it must come slowly and by a reformation,

not of criminals, merely, but of the social conditions that produce them. Prevention rather than punishment or even reformation will be the goal of a wise society.

Administrative Supervision.—This is in reality an extension of police functions, though its agents are more often known by some other name, as commissioners, inspectors, etc. Its purpose is likewise public security, though not so much against open violence as against unsuspected and indirect dangers. This function is really a revival of a mediæval system, denounced by Adam Smith and discarded in part during the earlier part of the century. It must be remembered, however, that its present form is far better than the discarded one. It includes the inspection of sewers, tenements, mines, factories, ships, steam boilers, tramways, railways, etc., the testing of articles of food, such as milk, meat, etc., and also of many articles, like gun barrels, silver and gold plate, etc., where only expert examination can determine quality.

We cannot here discuss the extent to which such legislation should be carried. It is important, however, to notice that the exigencies of modern life have actually forced it upon us in spite of the most vigorous opposition on the part of believers in ultra-private enterprise. The more complicated our civilization becomes, and the more sensitive our social organization, the more indispensable such protection is found to be. In an increasing number of cases men cannot tell what they are buying or discern whether it secures their interests or not. As Professor Jevons tersely says: "While it is a fact that people live in badly drained houses, drink sewage water, purchase bad meat or adulterated groceries, it is of no use urging that their interests would lead them not to do so. The fact demolishes any amount of presumption and argument. We may assume that no consumer wants to buy putrid sausages, poisonous pickles, dangerous guns, or fraudulent plate. Thus the government official who excludes these things from public sale actually assists the purchaser in carrying out his own desires."

SUMMARY.

1. Expenditure for national defense has greatly increased in recent years, in Europe by the maintenance of armies, and in the United States by the payment of pensions, an expenditure only nominally for the purpose of defense.

2. National defense is an economic necessity, and is, in many ways, remunerative.

3. Expenditure for internal security is closely allied and likewise rapidly increasing. Increase means, not wastefulness or increasing danger, but improved service.

4. Administrative supervision is a necessary form of protection to society revived after a brief suppression.

QUESTIONS.

1. What is the cause of increased expenditure for security? Is it justifiable? How far is its necessity a misfortune?

2. What is the real connection between pensions and national security? How far is such payment justifiable?

3. What is the significance of increased expenditure for internal security? How much of the increase is due to new dangers?

4. What has been the tendency regarding administrative supervision? How much is included under this term?

LITERATURE.

See works already cited, especially

Jevons, W. S.: *The State in its Relation to Labor*.

CHAPTER III.

EXPENDITURES FOR THE POOR AND THE UNFORTUNATE.

THIS includes primarily the paupers, the deaf, the blind, the insane, and the feeble-minded, who from their natural defects are unable without assistance to hold their own in the struggle for existence. We might also include here those extraordinary cases of sufferers from fire and flood and other widespread and sudden misfortunes, but as these are less important we will omit them from our present consideration.

In earlier ages the defective classes were sometimes most summarily disposed of, but the moral development of the race makes this impossible. For a long time, however, their only resource was begging, as we see from the constant allusions of the New Testament and other ancient books. This doubtless assured them a most uncertain and wretched subsistence. In the Middle Ages they were systematically but insufficiently and unwisely cared for by the Church, whose great monastic establishments were largely used for this purpose. This system was enormously expensive relatively to its results, and its obvious abuses were one of the chief causes leading to its abandonment. It demoralized the poor, neglected the defective, and treated the insane with almost incredible cruelty. It was a palliative but not a remedy.

Government care of these classes is now recognized by all as a necessity. Their removal from immediate contact with the rest of society, and systematic treatment of them by experts, is not only a great advantage to them but an immense relief to society.

From the standpoint of economics little need be said regarding the treatment of the insane and the feeble-minded.

The expense is inevitable and should be cheerfully borne, for, though abnormal beings, they feel, and a human feeling is an ultimate thing, a good or an evil which we who have the power to determine its character must wholly respect. Here, as elsewhere, however, that expenditure is best justified which tends to prevent insanity by the removal of the causes, sanitary and otherwise, which produce it. If our insane asylums constantly increase it will suggest that the State fails to take care of its citizens until they have become insane.

The problem of the blind and deaf is primarily one of education, which must be of a special character such as local facilities cannot furnish. By means of such education these unfortunate members of society can become often so useful as to be no burden to society. It is needless to say that this is not all of the problem. They must exist, and we are not at liberty to decide the matter regardless of their convenience or well-being. The worst thing that can befall a man is to be deprived of all opportunity to be useful to his kind. This opportunity the State should, if possible, provide for those who cannot obtain it unaided.

The Difficulties of Poor Relief are far greater than those of the cases just mentioned, and its economic bearings indefinitely more serious. The reason is simply that in the case of the insane, the deaf, the blind, etc., nature has sharply drawn the line between them and the rest of society. No matter what advantages they enjoy, no one is tempted to become blind or insane for the sake of enjoying these advantages. Not so with pauperism. The majority of men under present conditions are necessarily poor, as poor, many of them, as paupers themselves, so far as accumulations go. Now, if the dependent poor are treated better by the State than the independent poor are treated by society, thousands of the latter will join the former. Discouraged by the fact that by their utmost exertions they get less than they could receive by no exertions at all, they naturally choose the latter. The history of poor relief is full of such cases. Early in this century, when the industrial revolution had produced

great suffering in England, a system of relief was adopted which pauperized thousands and immensely aggravated the difficulty. An allowance was given to each laborer in proportion to the size of his family. If he earned enough to meet the legal requirements he received nothing. If he earned less the balance was paid by the community. If he was out of work the community paid his wages, etc. Now, it seems just that a man should be guaranteed a minimum income by society; but what was the result? The measure was supported both by employers and employees. The employer could now cut wages without resistance on the part of employee. The men could live whether they worked or not. The wage-earning population became, it is said, mutinous and rebellious, intimidating the overseer. Poor rates became so heavy that it is said that some landowners abandoned their farms rather than pay the taxes. The law was long ago repealed, but the mischief it had wrought is by no means eradicated yet.

In America we have had no legislation so mischievous as this, but our experience has been most unsatisfactory. The relief of the poor has been so managed as to increase pauperism in many instances, especially when the poor receive relief in their own homes, and, worst of all, when such relief is furnished in money. Fraud in a thousand forms has resulted, and in all cases where such relief is loosely administered pauperism has been increased and the poor have been degraded. Experience has taught us the recognition of certain principles which we can only barely outline here.

1. A careful distinction must be made between the victims of temporary distress and paupers. The first lack goods merely, and may be helped without danger, often preferring positive starvation to the demoralization and humiliation of relief. They are very few compared with the other class, and often find private help sufficient. The second class lack character, and must be treated accordingly.

2. Attention should be directed to fundamental rather than surface needs. If a man lacks food because he is lazy it is

his laziness rather than his hunger which should receive chief attention. That is, *the treatment of paupers should be distinctly reformatory in character.* This cannot be too much emphasized. Chronic pauperism rests largely on defects of character. It is more difficult to reform paupers than criminals, and their condition is hardly less degraded. Crime is misdirection of energy; pauperism, lack of energy, or, as it has been well defined, pauperism is under-vitalization. The greater leniency accorded to paupers is due, not so much to their moral superiority over criminals, but to the fact that they are seemingly less dangerous.

3. Pauperism is closely connected with vice and disease, and should be treated with a view to the restoration of physical and moral health. Vicious practices should be stopped, and, if possible, the tendency to them eradicated. If by any possible argument a man may claim the right to spend in vicious indulgence the proceeds of his own industry no one will accord him the right to spend thus the bounty of society.

4. Pauperism is largely the result of a bad environment and wrong education. So far as possible the environment must be changed and the education corrected.

5. Above all things, industry must be inculcated. The labor of a pauper may be worth little to society; it is invaluable to his own manhood.

6. From the foregoing the conclusion has been generally drawn by American experts that, so far as possible, paupers should not be relieved in their own homes, where supervision and reformatory efforts are difficult, but in institutions under the direction of experts. The aim of American reformers has been either the total abolition of outdoor relief or its reduction to a minimum. Another idea is that of Germany, as seen in the "Elberfeld system," so called from the city which has tried it with great success. It is the reduction of indoor relief to its lowest terms and the substitution therefor of outdoor relief, relief in the homes of the needy. This prevents the breaking up of homes and enables the dis-

persers of public charity to give only so much as is needed. Cases which would require full support in an institution often find all the relief required in partial support in their own homes. Sometimes partial outdoor relief is required temporarily only, as when the breadwinner is removed by death and a widow is left with small children. This system keeps the family together, and it soon takes its place again among other independent families. It seems to the writer that the ideal of the Elberfeld system is a higher one, but it requires a pure and efficient civil service such as German cities have, and it necessitates also a general coöperation of the best social elements as friendly visitors with the officers of government. Private persons, in our defective system of administration, do not coöperate with government to the same extent as in Germany, and, where the "spoils" system prevails in the civil service, "wire-pullers," politicians of "the baser sort," take the place of trained experts in the service of government. Civil service reform is a question of economics as well as humanitarianism, for a poor civil service is in its effects cruel and wasteful and an obstacle to progress in all departments of social life.

7. The treatment of paupers should not be such as to make their lot attractive. It does not follow, however, that they should be starved or treated with gratuitous severity in any form. A rigid discipline and vigorous reformatory measures will do more to deter from voluntary pauperism than any amount of starvation and neglect. Severity is often the truest kindness. A tramp will endure exposure and destitution with fortitude who will be appalled at the sight of a woodpile and sawbuck.

8. Much pauperism is due to old age and failing health, coupled, perhaps, with previous improvidence or incapacity now past remedy. For such there is nothing to prescribe but humanity and kindness to ease the pangs of dissolution.

9. Finally, and most important of all, pauperism, though an almost incurable malady in its advanced stages, is largely preventable. The State can do little to prevent blindness

or deafness, it can only alleviate the misfortune. But pauperism is, to a great extent, the result of bad social organization. A pitiless system, based on unmitigated self-interest, an exaggeration of individual as opposed to social rights, a legislation which favors the strong, even a well-meant legislation which is negligent and unwise—any of these causes may multiply pauperism many fold. Nowhere does the duty of preventive legislation and wise, liberal *preventive expenditure* appeal more loudly to the conscience of society than here. Comparatively, at least, prevention is cheap and cure expensive, prevention is easy and cure difficult, prevention is profitable and attempted cure of little avail.

There are those who deny that the problems here discussed are economic problems. If these things in their cost to society, in their loss to productivity and their demoralization of organized industry, do not affect the problem of man in his relation to wealth, what things do?

SUMMARY.

1. The poor and unfortunate were formerly uncared for, then cared for by the Church and finally by the State.
2. The care of the deaf, the blind, and the insane is purely one of detail, the duty being admittedly a public one.
3. The treatment of paupers is much more difficult, owing to the ease with which wrong treatment increases their numbers.
4. Paupers are in general the victims of weakness of body and character. Their treatment should be distinctly reformatory in character, the inculcation of habits of industry being especially important.
5. Pauperism should not be made attractive nor treated with needless severity when due to old age, etc.
6. Pauperism should be prevented so far as possible, cure being both expensive and difficult.

QUESTIONS.

1. What victims of misfortune are the natural wards of the State? Why?
2. What was the earliest treatment of defective persons? Why? What has changed this policy?
3. What is the objection to leaving such to private charity?
4. What is the objection to church supervision and control? How did it work unfavorably?
5. What is the goal of public effort in behalf of the deaf and blind?
6. Mention the difficulties in poor relief. What is the real cause of pauperism?
7. What should be the aim of State relief?
8. What was the experience of earlier English legislation?
9. What is the Elberfeld system? the difficulty of introducing it in the United States?
10. Why are leniency and kindness difficult or even dangerous in dealing with paupers?

LITERATURE.

Toynbee, A.: *The Industrial Revolution in England*.

Boies, H. M.: *Prisoners and Paupers*.

Proceedings of the National Conference of Charities and Correction, a list of nineteen very valuable *Reports*.

The literature upon this subject is extensive, but not wholly satisfactory.

CHAPTER IV.

EXPENDITURES FOR EDUCATION.

OF all the expenditures of modern times that for education has grown most rapidly and constantly in the development of the modern State. We noticed the remarkable increase in England of the expenditure for internal security and reform of criminals, an increase of nearly 3,000 per cent in about seventy years. But in the same period the expenditure for education increased nearly 5,000 per cent, or over six times as fast as the average of the other civil departments of government. In France the expenditure for education was, in 1869, the last year of peace under the second empire, twenty-five and a half millions of francs; in 1883, after fourteen years of immense financial difficulties, the expenditure for education was one hundred and thirty-three and eight tenths millions—an increase of 425 per cent, while the expenditure for internal security slightly decreased during the same period. In England the expenditure for education is second only to that for internal security; in France it is surpassed only by that for public works, which, it must be remembered, is largely a revenue-bearing investment and not expenditure. The record in other countries is similar if not so marked, but we in the United States have relatively lost ground in this respect. If we have advanced our progress has not been nearly so rapid as that of either of the two countries named.

In ancient times, with a few notable exceptions, education was left to private individuals. During the Middle Ages it was left to the Church, whose services to education at this time in her monastic institutions are often underestimated. With the seizure of church property by the various monarchs of

Europe, and with a change of ideas regarding the functions of the State, the State was, however, compelled to take up the work of education, and with the growth of popular government the necessity of education was felt and emphasized. It is generally admitted that one cause of the defeat of France by Germany in the last war was the superior education of the German people. With the establishment of the republic France recognized the necessity, both military and political, of general education and vigorously applied herself to the task, as we have seen.

Education had become so firmly established a function of government in the days of Adam Smith that with all his dislike for State activity in such matters he admitted its legitimacy. Both he and his followers, however, favored State aid to primary education only. Higher education they considered a luxury for the rich which they should pay for. State aid to such was class legislation. This is an example of the narrowness of views to which this principle leads. While recognizing the public danger of illiteracy they characteristically regarded all the benefits of higher education as matters of private concern only—private luxuries. If a poor boy who could not afford the “luxury” of a higher education had talents to be a great statesman, inventor, or scholar, the State should not seek to develop these. They were his affair. How plain it is that such a policy is ruinously wasteful of the best treasures which the State possesses, the powers and faculties of its citizens! Whatever may be said as to what private beneficence *might* do, we must consider what it *does* do and has done. Does it offer any sufficient guarantee that the available resources of the State will be utilized? It is the function of private beneficence to supplement public activity. This it does do to some extent, and will do more when the value of State enterprise is appreciated.

It is urged against public maintenance of higher education that only a few can or will avail themselves of its advantages, and the many are burdened for their sake. This is true of

our courts. Not many people have lawsuits, but all help maintain the courts. It is true in a measure of every activity of government. Not a law is passed, not a tax imposed, whose benefits or whose burdens are distributed with perfect justice. It is as just as may be. But this is not the question. The advantages offered by a high school, academy, or university are not simply the privilege of individual instruction enabling a person to carry away a luxury which profits only him. Do such persons profit the State through the education thus acquired? To ask this question is to spare the need of the answer. There is many a university whose entire cost has been returned to society in clear cash by the service of a single one of its students, a service made possible by his education. But this is as nothing to the general influence exerted by people thus educated. They fill responsible positions, public and private, positions in which society exacts large capacities which only educated men can supply.

It is urged in view of the numerous private universities and colleges in the United States that private schools might render this service. But why should they? It is the State in particular which demands an ever-increasing number of competent men, ought to demand them, ought to demand more than it does, would do so if they were to be had. What more natural than that the State should furnish them? We justify State primary education on the grounds that the State requires of all the duties of citizenship; we should justify State universities on the ground that the State requires of many the duties of legislative and administrative service, and of all the development of their powers for the service of society.

But private colleges and universities do not adequately perform this service—cannot do so from the very nature of private enterprise. That a few such schools are of the highest rank none will deny, though even here the “highest rank” is lower than it need be on account of the waste of private resources. As a rule these are most wastefully employed. The State of Ohio has thirty-five colleges. Was such an in-

vestment wise? What would have been the result had these resources been united in a single university? This could not be, we are told, because no unifying power controlled the investment. Certainly; it is an example of the uncohesive and wasteful character of private enterprise in education. The unifying power needed was that of the State, the only one possible. Its university struggles weakly against such a rival league. It loses the majority of religious students of the State, and then is called irreligious; it educates few students and so educates few sympathies, receives few bequests and meager appropriations. If the private educational enterprise of the State were efficiently consolidated it would justify itself. As it is it represents divisive forces descended from an obsolete sectarianism. All honor to religious convictions past and present; but the confessedly disastrous influence of sectarianism upon private education emphasizes the need of coördination and the wisdom of private beneficence aiding rather than retarding the work of the State. The United States has four times as many colleges and universities as Germany, but the latter have more students and more professors than the former. Which system produces greater results in instruction and research? The function of a university is not simply instruction but also research. Few expenditures produce greater returns, direct and indirect, than this. Notice the remarkable results of research in German universities in the last half century, particularly in sanitary science. The discovery of a simple test for milk a few years since by a professor in an American State university has revolutionized the dairy business of that and other States. As a simple matter of economic production a body of expert investigators is one of the most profitable investments of government. Such a body can only be maintained by the State. Otherwise they must sell their services, divided and inefficient, to speculators who appropriate the results of their investigations.

The expense of modern research practically necessitates resources which as a rule only the State can adequately fur-

nish. Especially do the physical sciences, whose development has created so large a part of modern wealth, call for increasing outlays for their continued development. Private beneficence has done much and accomplished notable results, but by competing with the State rather than supplementing its work it has produced a superfluous number of embryos and has not yet achieved a single perfect development.*

We have considered at length the case of higher education because it is the only debatable portion of the problem of public education. Objections to primary education are now questions of detail, not of principle. It is interesting to note, however, that government in all enlightened countries has altogether abandoned the mistaken policy advocated by Adam Smith. It regards higher education not as a luxury which the rich should be left to pay for, but as a necessity of social development.

Under the head of education must be included art galleries and museums and many other agencies not directly employed in giving instruction. The impression should be overcome that the purpose of such things is the amusement of spectators. They are repositories of material for scientific study and investigation, and under the influence of science are rapidly ceasing to be curiosity shops. They are an indispensable adjunct of higher education. Art galleries have a particularly broad and beneficent influence upon society. Of course, if beauty has no value, if a house has no other use than shelter, and paint no other purpose than to preserve timber, if a sunset might as well be mud color as rainbow tinted, if exquisiteness of form and color and the manifold

*It is not intended to disparage the results of private beneficence in higher education. Not only has it accomplished great results directly, but it has created the sentiment which now makes public effort possible. The lack of coördination, also, which has so greatly lessened its efficiency, was not its fault, but was inherent in the situation. Its record is that of self-denying and heroic effort against overwhelming difficulties, and the wonder is that it has accomplished so much. We do not estimate lower than others the results of this system; we estimate higher than others the possible results of a wiser system, which this should supplement.

movements of grace by which Nature speaks from her soul to the senses—if these are not worth the trouble it costs to perceive them, then art galleries and much more besides will find little to justify their existence. But if such things have value, if art is the interpreter of nature and a means of using wealth which confers supreme satisfactions, then it is preeminently the State which should make such expenditure. Only so can the rare and costly works of genius be made a general good and enabled to confer their greatest service.

We often hear of public luxury as though it were a reprehensible thing. What do we mean by public luxury? We have seen that luxury consists in a false distribution of wealth. When a rich parvenu buys a masterpiece of art and locks it up it is a luxury. It is so utilized that it renders little service to him or to others, and so attains but a fraction of its possible utility. If he were the one man in society able to appreciate or profit by that picture it would not be a luxury, but a wholly justifiable expenditure. Of course that can never be the case. If, now, the government buys that picture and puts it where the largest possible number of people can see it, it cannot be called a luxury. It renders its greatest possible service to society. The writer has no hesitation in expressing the conviction that a public art gallery and a public library should be the aspiration of every community and the immediate attainment of all those which have a reasonable development of private affluence. This is not luxury, but the best possible safeguard against luxury, which by the misapplication and non-utilization of wealth makes us poor in our abundance.

SUMMARY.

1. In modern times expenditure for education has enormously increased in highly civilized countries.
2. Education as an activity of the State was partially admitted even by Adam Smith.
3. Higher education, however, was regarded as a luxury of the rich, to be left to private enterprise.
4. Higher education has now been generally added to the educational work of the State.
5. This is necessary to the maintenance of free institutions and to the development of needed individual talents.
6. A perfectly equal distribution of educational as of other advantages offered by the State is not possible.
7. Private universities and colleges have not sufficiently provided for higher education nor wisely economized social resources, owing to a lack of coördination in their efforts.
8. Art galleries and museums are a part of the machinery of public education, and are not to be condemned as luxuries.

QUESTIONS.

1. What did Adam Smith think of elementary education by the State? of higher education? Why did he distinguish them? Was he right? Why?
2. Why should the State provide for elementary education? for higher education? How far do the two differ?
3. What is the defect of private management of higher education? Is this defect inherent? If private enterprise performed the work equally well would it be better to leave the service to it?
4. What is the function of art galleries and museums?
5. What is the difference between public and private luxury?

CHAPTER V.

EXPENDITURES FOR COMMERCE, DIPLOMACY, AND GOVERNMENT.

IN this chapter we consider a number of expenditures which are grouped together, not because of any inherent connection, but because all must be considered briefly, and they are all relatively slight in their importance.

Commerce.—Under this head are included, first of all, the maintenance of those industrial facilities which we have already considered in Part I: roads, bridges, canals, improvements in rivers and harbors, lighthouses, and many others. But little time need here be spent on this branch of public expenditure farther than to emphasize its importance and its necessarily public character. Most of these improvements and conveniences cannot be arranged so as to furnish a direct revenue sufficient to tempt private enterprise to undertake them. This is clear in the case of lighthouses, and even in the case of roads where private ownership and toll is possible no one would now return to the toll roads. The amount of expenditure will, of course, vary with a great variety of circumstances. In general, however, we may say that the State should act according to much the same rules as a wise individual would follow in the same position. We know, of course, that *subdivided* private enterprise is niggardly in its outlays for such purposes; but imagine a single person, a shrewd business man, in possession of all the resources of government and managing them as such men manage their business; would he leave our roads in their present condition? If not, we should not either.*

* Pullman, Ill., furnishes an illustration. The company owning the town finds that it pays to sprinkle the streets because, among other things, it is not necessary to paint the buildings so often as would otherwise be required.

Post office, telegraph, and railway lines are primarily commercial in their purpose, and subject to the same considerations, but they are generally managed as investments, the last especially yielding a considerable revenue. The difference of method between expenditure and investment is purely one of convenience, the latter method being preferable when it is feasible to collect the revenue in the operation of the enterprise and when the enterprise is of especial advantage to certain interests, or liable to abuse if its benefits are furnished without charge.

The cost of maintaining a currency falls to the State. This may in like manner be defrayed by a charge for coinage, and in other ways. Closely allied to this is the establishment and maintenance of a system of weights and measures, a slight but important and necessary expense.

In some countries special codes of commercial law and special commercial tribunals are maintained in the direct and exclusive interest of commerce. Bounties and subsidies, which we have already discussed, are, of course, expenditures to be included in this chapter.

Diplomatic and Consular Service.—This is not wholly but very largely a service in the interests of commerce. The modern State in its foreign relations is largely, if not chiefly, a social organization for the purpose of securing commercial and other economic advantages to its people. International disputes, and even wars, are seldom concerned with religion, or national honor, or claims of sovereigns, or even race antipathies, as was the case formerly. They are about economic advantages. These in different ways make up the principal duties of consuls and ambassadors.

Government.—All the expenditures we have been considering are expenditures *by* government. We have to consider now certain expenditures *for* government; that is, expenditures for certain governmental functions too general in character to be ranged under any of the heads we have considered. Such are expenditures for legislation and administration. In some countries, notably England, legis-

lators get no salary. The result is a development of public spirit on the part of wealthy and able men who, in England, serve the public with as much disinterestedness as in any country in the world. On the other hand, the system seems to prevent poor men from entering Parliament, though this difficulty is partly met by private subscriptions in their behalf. The success of this system in England is doubtless largely due to peculiarities of the people and the distribution of wealth. That country has many wealthy men, who, by reason of social and other conditions, are relatively free from the spirit of money-making. In new countries wealthy men are largely successful money-makers, who are not likely to lay aside their habits of looking out for a good bargain if they are not made to realize their obligations by the payment of a salary. For this and other reasons the new countries founded politically by Englishmen have adopted the principle of paying legislators.

The amount of the salary is a matter of dispute. Unquestionably no attempt should be made to pay members of Congress the full pecuniary value of their services. This would be offering a strong mercenary inducement, and would probably attract mercenary men. On the other hand, petty and inadequate salaries are a provocation to fraud, neither appealing to the generosity of the rich nor satisfying the necessities of the poor. It would seem that the general principle governing the payment of salaries ought to apply here in full force. This we have seen to be the standard of life; that is, an adequate provision for the life of the official, due regard being had to the influence of his position upon the necessary demands of his establishment. The social and moral importance of keeping families together, the expense of change of residence, and the social demands of life in an official center should be fully considered in making the necessary estimate.

The administrative department includes not only the official head of the nation, but that of various subordinate officials connected with this function. In all countries such

services are paid, and in the case of monarchies very highly paid. At the center of government are those ornamental and yet indispensable functions of government which are so expensive. The importance of these functions is variously estimated in different countries and paid accordingly. The French Republic pays its president over fifteen times as much as does the United States. No rule can be laid down farther than that the nation must not demand socially more than it pays in appropriations.

Tax Collection.—This is an expenditure of government which aggregates a large amount. We may say of this, as of every other expenditure *for* government, that it is not a consumption of wealth by men in a social capacity for the purpose of conferring direct satisfactions, as is the case with art galleries, schools, etc., but a production expenditure which should be made as small as possible, relatively, to the work to be accomplished. Of course reductions must be limited by efficiency and the necessities of an honest service.

SUMMARY.

1. The government expenditures for commerce include the cost of maintaining roads, bridges, harbors, etc., the cost of maintaining a currency, and commercial law and tribunals.
2. The diplomatic and consular service is primarily an expenditure for commerce.
3. A large item in government expenditure is for the maintenance of legislatures and administration.
4. The salaries of public officials should be measured neither by the value of their services nor by their ability to forego payment, but by the requirements of living in official station.
5. The expense of tax collection is an expense to be minimized rather than extended by the development of society.

QUESTIONS.

1. What is included under government expenditures for commerce?
2. Should these expenditures be minimized or not with the progress of society?
3. What is the chief reason for the existence of a diplomatic and consular service? In what respect does this differ from former conditions?
4. What are the advantages of the English system of unpaid legislators? Its disadvantages? Would it work equally well with us? Why?
5. If legislators are to be paid for their services what law should determine the amount of their salary?
6. In what respect does the expense of tax collection differ from that of many other functions of government?

LITERATURE.

Bastable, C. F. : *Public Finance*.

The principal literature on the subject is by French and German writers, and is therefore not enumerated here.

PART III.

PUBLIC REVENUES.

CHAPTER I.

REVENUES FROM PROPERTY AND INDUSTRY AND MISCELLANEOUS SOURCES OF REVENUE.

THE revenues of the State are derived mainly from three permanent sources and one temporary source. The permanent sources are: first, landed property and forests, the State domain; second, productive enterprises, and, third, taxation. The chief temporary source of revenue is loans. Loans are called a temporary source, as they imply repayment, which must be derived from one of the other sources, and this repayment enables us to use them wisely only in temporary emergencies of one kind and another. To these sources must be added certain minor sources which will be described at the close of this chapter, fees, fines, etc., involving a different principle from either of the foregoing, but of comparatively little importance in their application.

State Domains.—By domains we usually mean agricultural lands and forests owned by the State and managed in the interest of the public revenue. This is one of the oldest forms of State industry, and dates from the time when the king represented the State, and yet was, like his subjects, a private property holder. The State in early feudal times had a very limited separate financial existence. The king had estates of his own, from which he derived an income in the ordinary way, an income which within wide limits he used as he pleased. The king had certain military rights over his sub-

jects, but, being in the matter of property chiefly a private individual, he had very limited rights over their property, and could not take it even for taxes. We have now to consider the fate of the king's estates. Slowly the king came to be a public rather than a private person. As the military and other functions of sovereignty developed individual resources did not suffice. War, being undertaken for public ends, lost its character of a private affair, and along with it the king himself and his property lost their private character, and became enlarged to meet the circle of wider interests. Instead of saying to the nation, "This war is your affair; I cannot pay for it, but expect you to do so," the king found it to his advantage to ask for more resources and secure an enlargement of his domains and his revenues. In so doing he necessarily lost his private claim to these domains and revenues, and they became indisputably the property of the nation. The former condition of things is clearly indicated by the language of English law. When an estate is left without claimant it falls "to the crown." It does not, however, in the least become the personal property of the sovereign. Indeed, the sovereign now has no power of disposal of the so-called property of the crown, nor even any use of the income from it. The English monarch long ago relinquished these to the State, receiving in return an annual allowance determined by Parliament. Out of this the sovereign may, like any other paid officer of government, accumulate private property which is entirely private in character. The private fortune of Queen Victoria is said to amount to many millions. This property is to be sharply distinguished from the property of the crown, which does not belong to the queen at all, but to the State.

The revenue from "domains and forests" varies greatly in different countries, but is only a small percentage in most modern budgets. In Prussia, Saxony, Würtemberg, and Bavaria it amounts to from seven to fifteen per cent of all revenues, the largest percentage being found in Bavaria. While until recently there was a strong tendency of the

modern State to sell all arable land, a tendency from which there is now a slight reaction, for reasons already given the State ownership of forests assumes ever larger and larger proportions.

Productive Industries—Railways.—The purchase of railways by the State has invariably been by bonds which have increased the public debt. The profits must, of course, cover the interest on the additional debt before there can be any *net* increase of revenue from this source. The net increase of revenue in Prussia has exceeded thirty million dollars per year of late in spite of constant improvements. The result in other countries, however, has not been so satisfactory. The reasons are various, some of them permanent, others temporary. First, State lines are often private lines purchased by the State, and the price paid is generally greater than the cost of construction. Second, the State has sometimes, as in Belgium, built its own lines, but allowed private companies to build competing lines and then been compelled to buy up these lines just as private companies are compelled to do. The result is a loss such as we have considered in the case of monopoly duplicates, a loss of capital which, though dead capital, entails its interest charge upon the State. These causes are irreparable under any system of final ownership, but they are due not to public but to private ownership.

A third reason is that lines are often built for military reasons where commerce does not warrant their construction. This, of course, entails a loss of revenue, but one which should be charged rather as a war expenditure than as a railway deficit. Such a loss may or may not be permanent, but it applies only to countries specially situated, not to countries like England, the British colonies, or America.

A fourth difficulty is well illustrated by France and Canada. After the main routes have been appropriated by private corporations the State has at times constructed minor lines and networks, which in themselves could not be very profitable, and have been at the mercy of these private corporations. If the State enters upon railway ownership and

management it should command the situation. The proposal has been made that our federal government try the experiment of State management by the purchase and operation of a single transcontinental line. Private railways would take care to make the experiment a disastrous failure.

Another difficulty is territorial divisions ; the small States of Europe, having a more expensive management, find their railways less profitable than others. Another most serious difficulty is the newness of some of the countries in which State ownership has been undertaken. This is true of Canada and the Australian colonies, and in another sense of countries like Austro-Hungary and Roumania, which, though well populated, have but begun the industrial development which can make railroads profitable. Of course, in such cases present receipts are no test of the merits of the system. A final source of diminished revenue from railways is the clamor of the public for lower rates. This, of course, may not mean a loss to society, since lower fares may be more advantageous than high revenues. It would seem unfortunate, however, to have passengers and freight carried in part by taxation of the general public.

Before leaving these industries it is interesting to notice what a part the revenues from them and State domains play in a few modern States. In Saxony, Baden, Bavaria, and Prussia considerably over one half of the revenues is derived from all "gainful occupations," taxation thus assuming a relatively less important rôle.

Manufactures.—Several lines of manufacture are carried on by European States. There is first the manufacture of government supplies, especially that of arms and munitions of war. This, however, does not concern us here, for though it may lessen expenditure or improve service it does not produce revenue. Another important line includes the so-called model manufactures of France and other States. Tapestry, carpets, porcelain, etc., are manufactured for presents to foreign States, furnishing of government buildings, and also for their influence upon the style and quality of private

manufactures. These, of course, usually produce no revenue, but the reverse, and the expenditures for them must be placed under "education."

The case is quite different for monopoly manufactures of tobacco, matches, etc., which in many States are conducted by government purely with a view to deriving a revenue from them, and which we may call *fiscal monopolies*. This is somewhat analogous to the policy of England and the United States, where these articles, though left to private manufacture, are taxed by the State. Such monopolies exist in France, Italy, Austria, etc. In France the tobacco monopoly has produced about sixty million dollars per annum, and in the other countries it is correspondingly productive. Strictly speaking, this is not an industrial revenue for the most part, but only a way (and in some respects an excellent way) of collecting taxes on such articles. The similar management of the liquor traffic has been urged but not extensively tried. Switzerland has, however, established a government monopoly of alcoholic liquors. South Carolina has established government monopoly in the retail business in intoxicating beverages. Government monopoly in such cases has certain advantages and, of course, certain grave objections.

Gas, Electric Lights, etc.—These are plainly a source of industrial revenue when public property, and of all the purely industrial sources we have mentioned they are the ones whose revenue record has been most favorable and least doubted. This has been sufficiently shown already, and, indeed, is admitted by prominent opponents of the system.

The Post Office.—This we have considered under the head of expenditures as a branch of the public service sometimes conducted with so low a scale of charges as to require aid from the State revenues. This, however, is by no means the rule. In most of the countries of Europe accounts nearly balance, while in England, France, and Germany the post office furnishes a considerable revenue. The Prussian revenue in 1888 was about seven million dollars. The advan-

tage of these countries is that they are compact and well settled, and there are no long and unprofitable routes through new districts to reduce profits, as in the United States. Our post office will doubtless soon pay a considerable revenue if present rates and facilities are maintained.

Banks.—These may rather be called commercial than industrial sources of revenue. Banks necessarily depend more or less upon the support and coöperation of the State, but though the ownership and management of them by the State has been much urged, only Sweden and Russia operate banks as State institutions. The German Imperial Bank, of which a part of the stock is owned by the empire, divides its profits with the State after a certain point of profit has been reached, the State deriving from the bank in 1890-91 an estimated revenue of about three hundred and fifty thousand dollars. State savings banks have been formed in Belgium, Italy, Holland, France, Austria, and Sweden, but they have done little more than to receive numerous small deposits and use them in connection with the public debt.

Lotteries have been much used by governments to raise money, both in American States, as Massachusetts, after the Revolutionary War, and in Europe. In some States lotteries are a government monopoly, and in Italy in 1889-90 a revenue of fifteen million dollars was anticipated from this source. This method, however, is now generally condemned, and England, Hesse, France, Sweden, Bavaria, and Switzerland have abolished this demoralizing practice.

Fines are an incidental means of revenue. They are imposed as a punishment, and are usually approved as such. They become dangerous and vicious when they are imposed unjustly, either in excess of guilt or in lieu of other and more suitable penalties, simply because of their revenue value. Closely allied to this is the revenue derived from prison labor. The temptation to make prisons pay has not infrequently resulted in the grossest abuses, sometimes destroying the entire value of prison discipline.

Fees are often charged for certain services of public

officials rendered to individuals, because these services, although rendered in the general interest, have a special importance to those who receive them. The payment of fees is, therefore, in many cases entirely just and appropriate, so far as the individual who pays them is concerned. Moreover, if the fees are collected by salaried officials who have no interest in increasing their amount and who can be held to strict accountability, little can be said against the system in certain branches of the public service. This is by no means the case, however, when the fees collected go to the collector, especially if he can so interpret or manipulate his function as to make it a means of extortion. This has been the case in many instances where no such power was suspected. The ingenuity of officials in such cases is a menace to the public safety. Officers of government in American cities have in several instances received revenues of from fifty thousand to one hundred thousand dollars from fees, which constituted a disproportionate remuneration, and these fees have proved a source of corruption in politics as the officeholder has been obliged to pay his party for the office, and there has been a general demand for their abolition.

Gifts.—These are a minor source of revenue upon which comparatively little reliance is placed by the modern State. Nevertheless gifts are more important than generally supposed. Formerly they may have been made more frequently for general purposes than at present, but for special purposes they were probably never so frequent as now. Public educational institutions are the chief recipients. The United States Military Academy has recently received a large gift, and probably every State university in the United States has received gifts, great or small; some of these indeed very considerable. Cities occasionally receive public library buildings and parks as gifts. The United States received nearly a million dollars a few years ago to be used in paying off the public debt. It is to be much desired that gifts to the State should increase, as that would, on the one hand, imply patriotism, and on the other help to cultivate it.

SUMMARY.

1. The earliest source of government revenue was the income from the sovereign's estates or domains, and was strictly private property.
2. Domains, now entirely appropriated by the State, constitute a minor source of revenue, especially in some parts of Europe.
3. The industrial domain in the form of railroads, and especially municipal service, is an increasing source of revenue to the modern State.
4. Railways are, however, often unproductive on account of low charges, military complications, the undeveloped condition of the State, etc.
5. Manufactures are now profitably conducted by the State, especially monopolies of tobacco, etc., in Europe.
6. Banks owned wholly or in part by the State have often produced revenue.
7. Lotteries, formerly much relied upon, are now generally discarded.
8. Fines and fees are sources of revenue often abused.
9. Gifts are at times an important source of revenue and one to be encouraged.

QUESTIONS.

1. What is the history of domains as a source of government revenue? What change in the ownership?
2. What is the present importance of territorial domains as a source of revenue?
3. What is the industrial domain? Its principal forms?
4. Why have railways often paid little or no revenue under State management? Is this necessarily an evil? Is it to be expected in the United States?
5. What forms of manufacture have produced important national revenue? municipal revenue? What are the reasons for State ownership in each case?
6. What use has been made of banks? of lotteries? How far is this desirable?
7. What use should be made of fines and fees? What abuses attend their use at times?
8. What is the importance and the propriety of gifts to the State?

LITERATURE.

See books already cited.

CHAPTER II.

TAXATION.

The Right of Taxation.—*Taxation and Private Property.* As the State determines what shall be private property it determines the conditions of its existence, and, as we have already seen, there has nowhere existed any such thing as absolute private property. The rights of private individuals have always been of a more or less limited nature, and among the rights reserved by the people in their organic capacity will be found, in every civilized State, the right to take a portion of the wealth produced for such purposes as the law-making power may deem fit. The aim, of course, should be the promotion of the public welfare.

We see, then, that the right to tax is a part of the right of private property. Both have grown up together, and both are defended alike by constituted authorities. Lawyers often say that taxation is a payment for protection, yet those laws which apply to payments and debts arising out of failure to make payments do not apply to taxes. It is sometimes attempted to defend public schools as adding to the value of private property, as if that were supreme, whereas it is solely a question of the welfare of the land, and, of course, property is but a means to an end, and the end is man. The elements of private contracts are not present in taxation.

Taxation Increases with Freedom.—Not only has taxation been the means by which peoples have generally achieved their freedom, but the maintenance of that freedom has been found impossible without large outlay, especially for education. Compare despotic Russia's State expenditure for schools, thirteen cents *per capita*, with that of the

enlightened and free republic, the State or Canton of Zurich, in Switzerland, one dollar and twenty-five cents *per capita*. It may be, however, more correct to say that governmental expenditures are large in all civilized nations; for expenditures are one thing and taxes are another, because there are other sources of revenue than taxation, and of late there has developed a laudable tendency to utilize other sources of revenue for a larger proportion of the income of the State.

Small expenditures mean small results, and in the main we may say that no money we pay begins to yield such returns as money paid in taxation, provided always that it is prudently expended by a good government. Let a small house-owner in an American city who pays, say, fifty dollars a year in taxes reflect on what he receives in return. Can he mention any other expenditure for which he receives, dollar for dollar, so much? Streets, libraries, free schools, protection to property and person, including health department, pleasure grounds royal in their magnificence—all these are placed at his service. What private corporation ever gave one fifth as much for the same money? When we compare various countries at the present time we find that expenditures of barbarous and backward countries are small. In some, doubtless, there is no real taxation; what is paid in these countries is more like ransom, something exacted of a subjugated people, not self-imposed taxes. So if we compare the past with the present we shall find large increase in expenditures with advance of civilization.

High Taxation and National Prosperity.—*No country was ever yet ruined by large expenditures of money by the public and for the public.* Countries have been ruined by evils connected with taxation. Robbery and extravagance have frequently accompanied both expenditures of government and taxation, and these have ruined great nations. Rome may be cited as an instance. The case of France before the Revolution is also instructive. Books are full of the evils of burdensome taxes in pre-revolutionary France, but the truth is that the total amount raised by taxation in

France was ridiculously small as compared with nineteenth century taxation. The trouble was that the burden was unjustly distributed, and the wealthiest classes shifted the taxes on the weak and defenseless.* France has since then prospered under heavier taxation. The taxes over which our forefathers in this country and in England fought, bled, and died were not large, and the taxes in themselves were not the real grievance. It was the evils connected with taxation against which they successfully struggled.

Public Parsimony.—Let us turn our attention to some of the evil results of undue economy or niggardliness.

It is said that typhoid fever broke out in Duluth, Minn., and Denver, Colo., a few years ago, on account of failure to spend sufficient money for public health, and that a few years earlier Memphis, Tenn., lost two thirds of her population and one fourth of her commerce on account of a niggardly policy. Whatever may be the facts in these particular cases, there are few American cities which do not display a wasteful parsimony with respect to sanitary measures.

A scandal arose some few years since in Brooklyn about overcrowding in an insane asylum, and short-sighted parsimony in cities is continually leading to waste and destruction. Our great cities are now failing to provide sufficient school accommodations for children of school age, and large numbers are growing up to take their place among the ignorant and vicious poor. We can see in our national capital many results of the idea that that is the best administration which spends least. It is on that account that Congress refuses to pay the superintendent of schools in Washington a salary in proportion to the importance of the office. It is on that account that Congress has never yet made an adequate appropriation for the library of the Bureau of Education, which is doing so valuable a work. It is on that account that the heads of bureaus will not ask for money which they know they could use for the public advantage. It is on that account that

* Vauban, one of the greatest of the French economic writers of the eighteenth century, brings this out clearly in his work, *Dime Royale*.

Congress reduced the appropriation for our national library building from \$10,000,000 to \$4,000,000, a shame and humiliation to us; for which Congress at a later session offered a sort of apology in increasing the appropriation again. Said one congressman, "Ten millions is after all only a *per capita* expenditure of twenty cents." But another congressman replied, "Twenty cents means three loaves of bread." Perhaps this was a bid for labor votes, but could demagogism go further? The best part of the press laments this unseemly parsimony, but it is a legitimate outcome of the notion that that is the best administration which spends least.

We must guard against parsimony as well as extravagance, and in some respects the former is more dangerous, because it more readily conceals itself beneath the mask of patriotism. We praise a private individual who spends bountifully when his expenditures are justified by results. The case of a city is similar. We must be very careful, very prudent. What is needed is a more careful examination of particulars. We praise and we blame too much "in a lump." To cities and to countries, as well as to individuals, does this proverb of Solomon apply: "There is that scattereth, and yet increaseth; and there is that withholdeth more than is meet, but it tendeth to poverty." This is emphasized on account of the vast amount of nonsense talked about the large expenditures of States and cities. More or less is wasted, more or less stolen, but, after all, comparatively little; and we observe that governmental expenditures have increased most rapidly where there is no suspicion, even, of corruption. Those are looking for a Utopia who seek to reduce very greatly expenditures of modern States and cities. We can make no headway against a strong current of national life which brings about increased expenditures of governments. We must rather put ourselves in it and try to guide and direct it.

Remedies for the evils connected with taxation are in general of two kinds:

1. *Better adjustment of the burdens of taxation by a care-*

ful combination of taxes, national, State, and local, forming an harmonious system.

2. *Better utilization of public resources.*

But before we treat these remedies we must consider briefly a few technical terms. Our national taxes fall chiefly on commodities, and taxes of this kind are called *indirect*. They are not proportioned to the value either of property or of the income of citizens, and are very generally regarded as unjust to the poorer classes, unless counterbalanced by other taxes which bear more heavily on the rich than on the poor and well-to-do.

Indirect federal taxes are of two kinds : *customs duties*, or taxes on imported commodities, and *internal revenue*, or *excise taxes*, as they are also technically called, or taxes on articles produced in the United States. Internal revenue taxes are now confined to a few products, like oleomargarine, tobacco, and intoxicating beverages, the two latter yielding nearly all of the internal revenues. Among thinkers there seems to be a general sentiment in favor of the retention of taxes on articles produced in the country which are now taxed by the federal government. The question of free trade and protection is not involved. When the national government depends exclusively upon revenues from taxes on imported articles the revenues are too uncertain and too irregular and yield least when most is needed. The State and city revenues are largely raised by taxes on property. Such taxes, and taxes on incomes, are called *direct taxes*.

The Incidence of Taxation is a technical term meaning the ultimate distribution of the burden of taxation. The merchant who imports goods is as a rule not the one who pays the import duty, but the consumer is the one who ultimately pays it. This is a plain and simple case, but careful investigation shows that a great many taxes are not really paid by the persons upon whom they seem to be laid. They affect in some way the conditions of industry so that changes in prices or wages or rent really redistribute the burden and lay part of it upon others.

Proportional taxes are taxes in exact proportion to the property or income taxed. The rate is constant—one per cent, two per cent, or three per cent, as the case may be, throughout. *Progressive taxes* are taxes with an increasing percentage with increasing property or income, as one per cent on the first thousand dollars taxed, two per cent on the second thousand, and the like. Progressive taxation is often called *graduated* taxation. A tax is *regressive* when the rate per cent increases as the property tax decreases. If a man with five thousand dollars is taxed two per cent, and one with three thousand is taxed three per cent, this is regressive taxation. Business license taxes in Maryland, and generally in Southern States, are regressive. Indirect taxes are said to be, in their effects on the citizens, regressive. When we have one uniform rate of taxation but unequal assessment, the wealthy being assessed relatively less than the well-to-do and the poor, we also have regressive taxation.

A tax is *degressive* if a certain sum is exempt from taxation, and all above that sum is taxed at one uniform rate. If all incomes of six hundred dollars are exempt from taxation and all incomes above that sum, and only on that excess were taxed, say one per cent, it would be degressive taxation. Income taxes are often degressive. Degressive taxes are also called *progressional*.

1. Better Adjustment of the Burdens of Taxation.

—*The Property Tax*.—By a property tax we understand a tax levied on all property, real and personal. It is the tax which is the chief source of revenues in American States, and all the local political units. According to law all property in our States and cities is valued and taxed at a uniform rate. The only exception which occurs to the writer is Savannah, Ga., where the rate on personal property is a much lower one. Certain minor exemptions, however, are usually allowed by law. A small amount of household furniture, for example, is generally exempt. The main difficulty with this tax is that real estate, that is, lands and houses, is visible and can readily be found by tax assessors, while a great deal of prop-

erty—say one half of all property—is in form of stock, bonds, instruments of credit, and the like, and often cannot be found at all. The result is that real estate generally pays an undue share of taxes. Competent business men in Boston, for example, have estimated that in that city personal property is four times as valuable as real estate, although it is assessed for only one fourth as much. The problem is a better adjustment of the burdens of State and local taxes, so as to make those pay their share who own invisible or easily concealed property; also so as to make that considerable class contribute something to the support of government who have little or no property, but enjoy, nevertheless, large incomes, sometimes larger than the accumulations of the lifetime of the ordinary man.

Personal Property Tax.—The thought naturally suggests itself that vigorous efforts should be made to find personal property, and then that it should be subject to the same tax which real estate must pay. This, however, can scarcely be regarded as practicable, as all experiments in this direction have thus far proved futile. It is so difficult to find many kinds of personal property that the returns which such kinds yield are adjusted to practical exemption. Safe bonds, for example, bear so low a rate of interest that it is manifest the owners do not expect to pay taxes on them. The tax rate for State and city together in many American cities is as high as two per cent. This would mean forty per cent of the income of a bond bearing five per cent interest. Moreover, one State alone cannot proceed in this matter successfully. Bonds, notes, and mortgages move freely from State to State. Real estate is manifestly different, because, as it is known in advance what tax it will have to bear, the selling price is adjusted to the tax, and if the tax should be removed the price would be higher, so that the purchaser loses very little in the fact that property is taxed, and to remove the tax, providing it is one which has existed for some time, would be like making a present to the existing owners.

Some have hastily jumped to the conclusion that personal

property should, on account of the difficulties of taxing it, be altogether exempted from taxation. This conclusion does not seem warranted, for it would free a powerful portion of the community from bearing its just share of taxes. While miscellaneous kinds of personal property like those mentioned may be exempted from taxation, the tax can be retained on certain specified forms like bank stock, which can be easily discovered and occasion little difficulty. The writer would suggest that personal property be exempted from taxation unless it is of the kind specially mentioned as subject to taxation. If, however, it is decided to retain the general tax on personal property it should be at a much lower rate, say something like one half of one per cent, as the temptation then to evade this payment would not be so strong. Those who are called upon to pay nearly one half of their income in taxes feel that a gross wrong is done them, and the temptation to evasion becomes very strong.

Income Tax.—An income tax seems the most promising remedy, but against this there is in many quarters an unreasonable prejudice. Space is too limited to treat at length this subject. It may be said that while general personal property taxes become worse and worse the longer they exist, wherever a rational kind of income tax has been laid, as in Switzerland, Prussia, and England, the longer it lasts the better it works, and the more general the popular approval. It is the only way in which a large and influential and even rich class can be made to bear its fair share of taxes. Where this class, including professional men, is exempt from taxation, its members are apt to become careless and indifferent about government—poor citizens. Income taxes are in harmony with the democratic sentiment of popular government.

Inheritances and Bequests can be made to yield more than at present without any infringement of the rights of individual property. Collateral inheritances are taxed by New York, Pennsylvania, and Maryland; but why should collateral inheritance apart from a will be allowed at all

except among near relatives? Why should third cousins inherit from one another at all unless money is left by will? Are third cousins nearer to one than the town or city in which one has lived and where one has been able to acquire a fortune? The extent to which intestate collateral inheritance is carried is a survival of the sentiment of the time when people lived in clans, and is ridiculous in our day. Right and duty should be coördinated. Ought I to be compelled by law to support an uncle who is unable by incapacity to earn a livelihood? Then I should inherit from him; otherwise it does not seem clear that I should unless he leaves me property by will. So far as practicable the circle of legal duties ought, however, to be extended so as to include the circle of vital relationship. The property should go to the State in the absence of near relatives when no will is made. The clan is dead and forgotten; ordinarily there is neither acquaintance nor recognizable obligation between second cousins, not to mention twenty-second. Inheritances thus bestowed are pure gifts, wanton disturbances of existing abilities to use property. *The modern clan is society, and to it belong all claims to inheritance falling outside the circle of vital relations.* The enlightened English jurist, Jeremy Bentham, wished to restrict inheritance and extend escheat, and thus abolish taxation altogether; but this is going too far.

The special taxation of personal estates when received by inheritance or bequest has been mentioned as a measure whereby personal property can be reached. Massachusetts and New York have each a special tax on such estates; the former a rate of five per cent on collateral inheritances, and the latter a general rate of one per cent. The meaning of this tax law is that at least once in each generation personal property shall bear a tax. The law works well in practice in both States, though in New York at least a more searching administrative machinery is to be recommended. This arrangement for taxing personal property is far more effective than the ordinary American personal property tax,

and might well be substituted for the tax on miscellaneous and unspecified kinds of personal property. If a choice must be made between the two it is in the United States preferable to the income tax, and under existing conditions far more effective. When public opinion becomes sufficiently enlightened a higher rate should be adopted and a slightly progressive rate introduced, but a larger sum, say twelve thousand dollars, might well be exempted.

2. Better Utilization of Public Resources.—By this is meant that public property and its use should be paid for. Cities and States should stop making presents to corporations. If street-car companies use the streets they should pay for the privilege. This is sometimes done, but too often the public is robbed. The Baltimore street-car companies, for example, pay to the city nine dollars for every hundred they collect, but this is not enough. When five-cent fares are charged street-car companies in great cities can sometimes afford to pay as high as forty or fifty dollars to the city for every hundred they collect. Similar principles should be applied to other corporations using streets, like gas, electric lighting, telephone companies. It is, however, best for the city to manufacture its own gas and electric lights and to provide itself with water. This part of our subject has already been sufficiently discussed for present purposes.

Land Nationalization and Municipalization.—Mr. Henry George has come forward with a scheme for the abolition of taxation as ordinarily understood. His scheme, usually called "the single tax," is stated thus in his own words, printed in his organ, *The Standard*:

"*The Standard* advocates the abolition of all taxes upon industry and the products of industry, and the taking, by taxation upon land values, irrespective of improvements, of the annual rental value of all those various forms of natural opportunities embraced under the general term land.

"We hold that to tax labor or its products is to discourage industry. We hold that to tax land values to their full amount will render it impossible for any man to exact from

others a price for the privilege of using those bounties of nature in which all living men have an equal right of use ; that it will compel every individual controlling natural opportunities to utilize them by employment of labor or abandon them to others ; that it will thus provide opportunities of work for all men and secure to each the full reward of his labor ; and that as a result involuntary poverty will be abolished, and the greed, intemperance, and vice that spring from poverty and the dread of poverty will be swept away."

He proposes that the State shall take the pure economic rent of land, and thinks that this will abolish poverty. It might prevent people who do not care to use the land from keeping land away from those who want to use it, but how it would bring about all the predicted blessings it is difficult for most people to understand. With the best will and with every desire to be unprejudiced the writer has never yet seen how pure economic rent of agricultural land can be separated from the annual value of the improvements on and in the land. Apart from all this, the confiscation of rent, or even if it be called by so gentle a name as appropriation of rent, by the public without compensation to present owners will never, in the writer's opinion, appeal to the conscience of the American public as a just thing. Abstract reasoning based on assumed natural rights will not convince a modern nation. It is but another illustration of the danger of reasoning based on natural rights.

It is easy in cities to separate pure economic rent from rent for improvements, and it is done a thousand times a day. The principal evils of private land-holding are seen in cities, and the objections to land nationalization do not wholly apply to land municipalization. Many will favor the latter who reject the former, but even in this matter one should proceed cautiously. No confiscation or thought of confiscation should for a moment be tolerated, but if great and expensive changes are desired the burden should be diffused throughout the community equitably by means of inheritance taxes and other taxes.

SUMMARY.

1. The right of taxation is inseparable from the right of private property. Each exists, not for an arbitrary reason, but for the welfare of society.
2. Taxation is a means of achieving freedom, and necessarily increases with freedom.
3. High taxation is not incompatible with national prosperity, but its invariable accompaniment.
4. Parsimony is often an expensive policy.
5. There is need for a better adjustment of the burdens of taxation and a better utilization of private resources.
6. Taxation is direct, that is, upon persons and property owned by them, or indirect, that is, upon goods as such at a certain stage of their manufacture or sale.
7. The property tax now fails to reach personal property in a large degree.
8. A tax on incomes should supplement the property tax.
9. A tax on inheritances with escheat of intestate fortunes in certain cases to the State seems desirable and just.
10. Public property and privileges should be better utilized, and not so often given away.
11. The proposition to substitute rent for taxes seems unfeasible.

QUESTIONS.

1. What is the basis of the right of taxation?
2. What is the historic connection between taxation and freedom? the present connection?
3. What relation may taxation sustain to production? to national prosperity?
4. What two lines of improvement are possible?
5. Define direct taxation, indirect, progressive, regressive, degressive taxation; incidence of taxation.
6. What is the objection to the property tax? the income tax? the inheritance tax? What are the advantages of each?
7. What principles should limit the right of inheritance?
8. What reform is needed in the utilization of public resources?
9. What is Henry George's plan? What are its advantages? its objections?

LITERATURE.

- Ely, R. T.: *Taxation in American States and Cities*.
Bastable, C. F.: *Public Finance*.

CHAPTER III.

PUBLIC DEBTS.

PROFESSOR ADAMS, in his work on public debts, says : "The civilized governments of the present day are resting under a burden of indebtedness computed at \$27,000,000,000. This sum, which does not include local obligations of any sort, constitutes a mortgage of \$722 upon each square mile of territory over which the burdened governments extend their jurisdiction, and shows a *per capita* indebtedness of \$23 upon their subjects. More than two thirds of this has been contracted during the last fifty years. If local indebtedness were added, that is, the indebtedness of our American States and all similar bodies and all cities of the civilized world, the aggregate would be very much increased. This indebtedness, too, has been contracted during a period when wealth was rapidly increasing. Never could people pay taxes so well, and never have taxes been so heavy, as during this period ; but still there has been an average annual deficit in the national accounts of the world since 1848 of over \$530,000,000. .

What does this mean? The first answer plainly is that public expenditure has been immensely increased. This is due in part to expensive wars, but more to the increase of the functions of the State. Some of the items of this increase we have already noticed, especially the increase for education, justice, and reform of criminals and public works. We are tempted to add at first that this increase of public debts means also a failure of the public to grasp the real nature of what it is doing. It demands State services without realizing that when citizens call on the State for a service they essentially say to the State, "Put your hand in our pockets and spend our money for us." There is much

truth in this, but it is far from a complete explanation of public debts.

The great increase of public debts is due principally to two causes, wars and public works. The former are misfortunes, losses, however the result is expressed. The loss comes, not in contracting a debt, but in spending and destroying the property consumed by war. This loss cannot be postponed by a debt. It comes out of wealth existing at the time, no matter what arrangement is made. In former times each man bore the loss as it happened to fall on him. The modern method differs in just this, that the loss is transferred to the whole public. This, again, may be done in two ways. A tax may be levied at the time sufficient to pay all expenses, or a debt may be incurred and the necessary taxation spread over a longer period of time. In practice the latter proves far the best for at least a part of the expenses. It gives capital time to adjust itself to the extraordinary demands. A war debt is, therefore, not a misfortune, though it stands for a previous misfortune, war.

The case is clearer when we consider debts contracted for public works. Under this head we include primarily productive enterprises like railways, canals, forests, gas works. These, when purchased or constructed by the government, are the occasion of debts, sometimes enormous in amount. It might seem possible to pay for them by immediate and heavy taxation, since no more is taken out of the people than when the money is borrowed. But the national wealth is not like an ocean, alike in all its parts and instantly filling up where water is dipped out. It makes all the difference in the world where you dip. Here are men who have capital invested in a productive business; here are others who have capital lying idle. The State decides to make a public investment, and calls for capital. If it collects it by an immediate and heavy tax the first class have a part of their employed capital withdrawn, and their business is crippled or ruined. The others have some of their capital withdrawn, but the most still lies idle. The best that can be done in

such a case is for the first class to borrow of the second, which only makes private debts instead of public ones—a much more burdensome condition of things for the national industry. The wiser modern method is for the State to borrow the unemployed capital and leave the employed capital intact, then imposing a moderate tax which can be paid out of annual income. If the expenditure in question is an investment it presumably pays for itself in time without requiring taxation.

This brings us to the relation between taxes and debts. Taxes should never be so heavy that they cannot be paid easily out of annual income. If they trench upon national capital they derange private industries disastrously because they are imposed upon all without regard to the nature of their investments. But while taxes cannot safely exceed the national disposable surplus for each year it does not follow that the State may not take capital as well as surplus for its undertakings; only this capital must be taken from those who have *uninvested* capital. This cannot be done by any method of general contribution like taxation. It can only be done by public loans. Whether the loan is a wise thing or not depends altogether on the nature of the State's investment. If the State takes this capital ever so wisely and wastes it the people have lost just so much capital. If, on the other hand, the State takes capital which was uninvested and therefore unproductive, and invests it in a profitable undertaking, the net result to society is an additional profit. Public debts are no indication of national poverty. Whether a nation is growing poorer or not depends not on its indebtedness, but on its productiveness relative to its expenditures. Public debts are not a good thing in and of themselves, but they have incidental advantages which offset some of their disadvantages.

Having noticed the natural limits of both taxation and borrowing, we have now to ask, What kind of expenditures should be provided for by each? In general the answer is easy, though details are troublesome at times. Ordinary

expenditures, that is, those which recur with sufficient regularity so that they can be foreseen and estimated in advance, if not provided for by receipts from domains and industries must be met by taxation. If the State cannot do this it is a confession that ordinary expenditures are in excess of the disposable income surplus of the nation, a state of things which means bankruptcy if continued long enough.

Extraordinary expenditures, such as national misfortunes—war, flood, etc.—and public investments—railways, city gas works, etc.—should be met by loans. The function of loans thus becomes a double one: (1) the distribution of unavoidable losses, so that industry is as little disturbed as possible, and (2) the investment of national uninvested capital in productive public enterprises.

Constitutional Limitations.—There is a tendency, springing out of fright partly premature, to place undue constitutional restrictions upon the power to create debts. This tendency ought to be checked. It places States and cities at a disadvantage as compared with private corporations. It also tends to throw into the hands of private corporations enterprises which cannot be paid for out of one year's revenues, and yet properly belong to the public. Gas works are an illustration. At the present time excessive limitations, unworthy of a free people, make it impossible for some States to improve their own property. That was the case with New York a few years ago, for example, for the State owned a canal for the improvement of which her constitution did not allow her to borrow money! Provision should be made for the extinction of all debts within thirty-five years, or say forty as a maximum, that the present may not unduly burden the future, and especial precaution should be taken against hasty action. One precaution which may be recommended is the referendum, that is, a popular vote on the proposed loan. This is a frequent practice in American cities. Baltimore serves as an illustration, for there it is especially provided that no loans can be made until the people have by vote approved of them.

SUMMARY.

1. The amount of public indebtedness has greatly increased of late.
2. This is partly due to aversion to taxation, but primarily to the necessary increase of State functions.
3. Public debts also arise from an effort to adjust the losses of war and the expense of government with less disturbance of industrial conditions.
4. Public debts are often a substitute for private debts and are less burdensome.
5. Taxes should never be so heavy that they cannot be paid out of the national income.
6. In general, ordinary expenses, that is, those which recur regularly, should be met by taxation.
7. Extraordinary expenses should be met, that is, distributed, by loans.
8. The tendency to limit the right of loan by constitutional provisions seems unwise.

QUESTIONS.

1. What is the meaning of increasing State debts as regards extravagance? taxation? State service? private ownership?
2. Are public debts a burden when represented by paying investments? by non-revenue-bearing investments?
3. Do State debts indicate impoverishment of the people? Why?
4. What expenditures should be met by taxation? by loans? What is the natural limit of each?

LITERATURE.

Bastable, C. F.: *Public Finance*.

Adams, H. C.: *Public Debts*.

Scott, Wm. A.: *The Repudiation of State Debts*.

BOOK IV.

THE DEVELOPMENT OF ECONOMICS.

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CHAPTER I

INTRODUCTORY.

IF society were not progressive history would be of comparatively little value. The study of the present would give us all the essential facts needed to understand society, and, problems once settled or institutions once explained, the work would not have to be done over again. All this, however, is the very contrary of the truth, so contrary, indeed, that one of the most difficult things that either the scientist or the statesman and reformer has to do is to overcome this idea that institutions are fixed. Society moves but slowly, to be sure, and its development is so much slower than that of the individual that he easily overlooks its changes altogether.

The relation is much like that of a tourist to a glacier. He climbs nimbly over its rigid mass with as little sense of underlying movement as when he climbs the mountain itself. He maps out its confines and its jutting peaks with as much accuracy as the rest of the landscape. He returns to-morrow and next year and sees no important changes, and so thinks his investigation complete. But let a century elapse, and his map is wholly wrong. Another observer stumbling upon it wonders that a man could have made such blunders, and makes his map with painstaking exactness. But he may be as wrong as the first; indeed, he is as wrong unless he has discovered the cause of the discrepancy. *The glacier moves.* This slow but constant and resistless motion is the cause of every seam and crevasse, of the huge piles of bowlders at the sides and base, in short, of the great landmarks upon the map. The tourist may disregard it, but not the engineer who shapes the interests of a remote posterity.

The social sciences have an exactly similar experience. Map succeeds map, each claiming that former maps are false and assuming that conditions are fixed and that present and local explanations apply to all times and places, until finally the discrepancy is explained by the great law of social movement, which in turn becomes the object of investigation. When this movement is discovered a new importance attaches to past explanations. While they may have made the mistake of supposing that their conclusions were of permanent and universal application they contain much valuable observation, from which we may discover the laws of progress. Of course these maps of society have been imperfect—much more so than maps of glaciers. The facts are so complex, and men are so influenced by their particular environment, that no one man ever sees all the facts or arranges them in their true relations. Nevertheless, these observations have great value to us, and their one-sidedness is usually apparent. Moreover, it is the very discovery of these limitations which makes our own thought broader and more comprehensive.

Our study of history thus has two phases, never separable in practice though distinct in character, the history of economic life and the history of economic thought. With the former our study began, and its importance has been easily felt. The latter was reserved until the close. No sound system of economic thought can be built up without taking account of past systems. The thought of the present must master the thought of the past if it would be better than the thought of the past.

It may seem a matter for surprise that economics is so recent a science that it did not come into existence until the past century. Economic ideas are found in all the greatest writers of the past on politics, philosophy, and religion, and these gradually grew and developed until they were separated out of a larger whole and constructed into a separate science.

The question is often asked, Why did not economic science,

as a separate science, arise earlier in the world's history? An examination of this history gives the answer. We may take the Greeks. Why did the Greeks not have a complete political economy? Another question will help us to answer why. What have always been the two most fruitful sources of economic inquiry? They have been financial operations of governments and questions concerning labor. Now, great financial operations of governments are modern. The revenues of Athens at the beginning of the Peloponnesian War, in the fifth century before the Christian era, amounted to something like a million of dollars; a mere bagatelle in a modern national budget, which runs into the hundreds of millions. National debts are scarcely two hundred years old. Taxes like those we know are also new. For over a century Rome was untaxed, and Cicero in one of his works speaks of taxation almost as we might of a reign of anarchy. But what about labor? Labor was despised. Aristotle thought that all industrial classes, employers and employees alike, were unworthy of citizenship. Yet this is not all; political economy deals with industrial relations, and these relations were less numerous and less important in ancient times.

When we pass on from Rome to the Middle Ages, after the breakdown of the Roman Empire, we find an unsettled condition of society, which would naturally retard the development of political economy. As other causes for the failure of the Middle Ages to develop a political economy may be mentioned the too exclusive devotion of scholars to religion and metaphysics, the absorption with ancient authorities, and the dread of originality. The great men of the Middle Ages had their own work, and this was the reconstruction of a civilization on the ruins of the Old World. Church and empire were the agencies for this reconstruction, and these absorbed the talent of the times.

At the close of the fifteenth century a new world in the Occident was discovered, and this gave a new impulse to thought, and within two centuries forced new and strange

economic phenomena upon the attention of Europeans. This new world has continued to force new phenomena of an economic nature upon the old world even up to the present year, and has ever been a fruitful cause of economic study. The new course of trade to the East, which followed upon the discovery of the route to India around the Cape of Good Hope by Vasco da Gama in 1498, must be mentioned as still another cause of economic inquiry.

The great Protestant Reformation in the sixteenth century effected radical changes in economic, political, and intellectual life, and gave rise to speculations which finally terminated in what is technically known in the history of political economy as the mercantile system.

SUMMARY.

1. History is of great value to an understanding of society on account of its changing character.

2. The movements of society, like those of a glacier, are observable only by comparison of observations.

3. The history of economic thought is valuable as disclosing successive conceptions and in a degree successive observations of society.

4. The history of economic life is not to be confounded with the history of economic thought. The latter now occupies us.

5. Economics as a science is of recent origin. Formerly economic ideas were expressed in treatises on government and philosophy.

6. Economic phenomena were formerly more static and less important than now.

7. The contempt for industry, once general, prevented its becoming the subject of a science.

8. During the Middle Ages theology held too exclusive a place in men's minds to permit of the consideration of economic phenomena.

9. The discovery of America and the Protestant Reformation, with the resultant revolution in religion, government, and industry, stimulated economic inquiry, resulting in the mercantile system, the precursor of economic science.

QUESTIONS.

1. What is the value of history in general?

2. What is the difference between the history of economics and economic history? What is the especial value of each?

3. Why is economic science of so recent development? How does it compare with astronomy in this respect? Is there anything in the nature of the subject to account for this difference?

4. Why does not economic thought develop under a system of slavery?

5. What prevented the development of economic thought among the ancients? in the Middle Ages?

6. What has given rise to economic thought in modern times?

7. With what lines of thought has economic thought been connected in its development?

LITERATURE.

Ingram, J. K.: *History of Political Economy*, an admirable work, though not without its bias.

CHAPTER II.

ECONOMIC IDEAS IN THE ANCIENT WORLD AND THE MIDDLE AGES.

It is not proposed to present a history of political economy, which would require a far larger work than the present, but simply to indicate in the briefest possible way the main currents of economic thought.

The Orient.—Little attention is usually given by economists to the East, partly because it is probably insufficiently appreciated, partly because its general life has been so imperfectly investigated and materials for knowledge are still so imperfect and difficult of access; finally, partly because our young science has found more fruitful fields still unworked. The ancient Eastern nations were theocracies, and under the guidance of priests who prescribed duties and often methods of economic action, frequently going into details. The ethic of economics was somewhat cultivated, and such as their ethical precepts were they were reduced to practice. They entered into everyday life as our higher ethical principles unfortunately do not. We encounter warnings against the sins peculiar to wealth, namely, pride and arrogance, and exhortations to a kindly treatment of inferiors. Thrift and temperance were encouraged, just weights and measures prescribed. A simple division of labor between economic classes took place, and these classes sometimes became castes. Indeed, Sir Henry Maine says that in India to-day, with the exception of the two highest castes, "caste is merely a name for a trade or occupation."* Conservatism was held to be a sacred duty, and radical changes were considered rebellions against the divine law. Progress was thus rendered im-

* *Village Communities*, American edition, p. 57.

possible. National exclusiveness was a universal policy. Trades, commerce, and manufactures were held in slight esteem, but agriculture met with more favor. The ethico-economic ideas of the Orient deserve especial attention. The economic ideas of one oriental people, the Jews, have been tolerably well preserved in the Bible. These should be studied more carefully than they have been by economists. Biblical views about usury, debt, and land tenure are especially important.

The Greeks.—The three writers among the Greeks most interesting to the economist are Plato, Aristotle, and Xenophon, but by far the most important is Aristotle.

Plato describes a Utopia in his *Republic*. His aim was to picture an ideal society in which the ills of society were to be corrected by a communistic State, and he included a communism even of wives and children, going further than modern communists. The communism of Plato admitted, strange as it may seem, slavery, on which his social superstructure indeed rested as a base. The *Laws* of Plato is a more practical work. It aims to present not the best possible state, but only the second best, and deals to a greater extent with existing institutions.

Aristotle's principal work for us is the *Politics*, and it is indeed one of the most remarkable books in the world's history. Its influence is strongly felt to-day, for it was carefully studied by theologians of the Middle Ages, and through them entered into the thought and life of their time; and the thought and life of their time can be seen by the careful student to have entered in a thousand ways into the institutions of the nineteenth century. Gladstone, the English statesman, says the *Politics* of Aristotle is one of the three books from which he has learned most.

Aristotle combated the communism of Plato, and advanced arguments in favor of private property which we can hear any day uttered as new and original truth. But Aristotle was no anarchist. He said man by nature is a political being, more literally a State being, and he accorded to the State

large functions. Aristotle subordinated strictly the industrial life to the higher life-spheres of society, and in some respects the most advanced political economy is a return to Aristotle.

Aristotle, like the ancients generally, taught the sinfulness of interest. Money, he said, was barren. One piece of coin cannot beget another piece of coin; hence interest should not be allowed. This is only a part of his argument, but our space is too brief for further presentation. It should, however, be remembered that many of the arguments in favor of interest now heard would not hold for Aristotle's age.

Among the works of Xenophon there may be mentioned as of special importance *Hiero*, the *Cyropædia*, and the *Revenues of Athens*. The first two are romances, describing an ideal State, and the third deals with the finances of Athens.

The Romans.—There is less to be said about the Romans than about the Greeks in a history of the evolution of economics. Their economic life was remarkable and instructive, exhibiting the disastrous consequences of slave labor and of an excessive concentration of wealth, particularly of landed property. Pliny said the great estates, the *latifundia*, caused the downfall of Rome. The moral degeneracy of the empire is fruitful of economic consequences which deserve serious attention, and among these we may especially mention wanton luxury and widespread poverty. But, while the economic institutions of the Romans and the manifestations of their character in their economic life will repay investigation, they were not remarkable for independent thought. Their economic ideas, like their philosophical doctrines, were borrowed from the Greeks, and generally in the history of thought they occupy an inferior position.

Cicero, Seneca, and the elder Pliny are mentioned among the philosophers whose economic ideas are noteworthy, and Cato, Varro, and Columella among the writers on agriculture.

The jurists are, however, the most important of all. Whatever may be its imperfections, the Roman law, the *corpus juris civilis*, is the most remarkable legal system the world has ever seen, and for training in careful and accurate state-

ment is unsurpassed. Probably as a training for economic studies Roman law is among the most valuable branches of learning. It gives us also invaluable information about the economic institutions and measures of Rome.

Christianity.—The economic ideas of Christianity come next in point of time, but not next in the order of evolution. Christianity seems to be interposed here out of the logical order, and some will regard this as a proof of its divine origin. Suddenly we pass from weak and imperfect ideas, many of which are now quite antiquated, to a sublime ideal of economic life which we are only beginning to try to realize. The most modern movement in economics, as it is in part a return to Aristotle, may also be regarded as in part a return to the teaching of Christ, although yet far from the ideal which he placed before men. Christianity asserts the honorableness of toil, which is the exact opposite of what the Greeks and other ancients had taught. Christ and his apostles were workingmen whom Aristotle would have deemed unworthy of citizenship. This had, both directly and indirectly, tremendous economic consequences. It has, among other things, been a constant force pushing in the direction of the emancipation of labor. The doctrine of brotherhood is a powerful economic factor. Let us bear one another's burdens. Let each one bear his own burden also. Let us be sure not to be a burden to others, and at the same time help others. This tends to the conservation of human energy and to the development of man's physical and other powers.

The duty and the right of general enlightenment spring from Christianity. If humanity is so precious as Christianity teaches all the faculties of each person should be developed to their utmost. Education, with its undoubted economic value, follows necessarily.

Benevolence, which Professor Sidgwick in his *History of Ethics* says is the distinctive teaching which Christianity added to ethics, tends to the maintenance and increase of efficiency of men and the general productive power of men.

The prohibition of luxury implied in the command to love our neighbor as ourselves tends to the preservation of nations. Self-sacrifice and self-control in this, as in other directions, have high economic value.

The Middle Ages.—The religious and moral aspects of economic questions were considered by the theologians, who absorbed the learning of the time, and the canonical law, *corpus juris canonici*, contains what we may regard as the church doctrine of practical economics in the Middle Ages. The most remarkable writer, from an economic standpoint, as well as from other standpoints, who falls within this period was undoubtedly Thomas Aquinas, of the thirteenth century, the study of whose writings has recently been urged by the pope. He treated chiefly two economic topics—just price, *justum pretium*, and interest. The conception of just price still lingers, and the doctrine that all interest is sinful was in the sixteenth century modified and became the doctrine that excessive interest is sinful; and usury in later times has meant simply excessive interest, and not any interest at all, as formerly. The teachings of Aquinas in modified form still exist as a force in our thoughts and in our laws. Aquinas wrote commentaries on Aristotle, and what he taught was Aristotelianism modified by Christianity.

Professor Roscher says that the schoolmen of the Middle Ages asked in their economic inquiries, What is ethically allowable? that in the development of political economy we pass on to the fiscal jurists, who asked, What is legally allowable? that the economic writers and teachers of the early modern period, that which we are about to consider, the mercantilists and cameralists, as the teachers of economic ideas to German officeholders were called, asked, What is useful? and that, finally, in most modern times economists have arrived at the insight that real and permanent utility can be attained only through both the legally allowable and the morally allowable. In other words, law, morality, and utility must harmonize.*

* Roscher's *Finanzwissenschaft*, sec. 12 of second edition.

SUMMARY.

1. Ignorance of oriental thought has prevented a recognition of its importance in economics.
2. It is not systematic, but emphasizes the ethical elements of economics.
3. The Greeks are represented in this line of thought by Plato, Aristotle, and Xenophon.
4. Plato, in his *Republic*, represents an ideal society on a communistic basis as regards property and family. In his *Laws* he presents a more practical, though to his mind less perfect, ideal.
5. Aristotle, in his *Politics*, favored private property and accorded large functions to the State. He argued against the taking of interest.
6. Xenophon's *Hiero*, *Cyropædia*, and the *Revenues of Athens* constitute important contributions to the subject.
7. The Romans, in the persons of Cicero, Seneca, and others, added little of importance except on agriculture.
8. The Roman jurists, however, developed a most remarkable system of law which is incidentally of immense importance to economics.
9. Christianity presents a development of oriental ideas, but a most remarkable advance, one not yet appreciated.
10. It taught the dignity of labor and the necessity of brotherhood, conceptions emphasized by all subsequent history and economic thought.
11. The theologians of the Middle Ages, notably Thomas Aquinas, reproduced the teachings of Aristotle in a form modified by Christianity.

QUESTIONS.

1. Contrast the ideas of the Orient with those of the Greeks on economic subjects.
2. How does Roman economic thought compare with the Greek? its legal system? What bearing has the latter on the former?
3. Mention as fully as possible the elements of Christianity which affect economics.
4. What was the character of mediæval thought on this subject?

LITERATURE.

The writings of the Greek and Roman authors mentioned are to be had in many forms, and are far superior to the commentaries upon them. A careful reading of the Mosaic code, the gospels, the letters of Paul, and the works of Plato and Aristotle, with attention to their economic aspects, is strongly recommended.

CHAPTER III.

ECONOMIC IDEAS IN MODERN TIMES.

WE now pass on to the economic systems of modern times. We can only gather together the threads and try to form a brief continuous narrative.

The Mercantilists.—The mercantile system, also called Colbertism, restrictive system, and commercial system, obtained from the early part of the sixteenth century until late in the eighteenth century, and its influence is still felt. Mercantilism is not, strictly speaking, the product of a school of political economists, but rather the name given to that economic policy of statesmen and to those detached economic views of writers which prevailed during this period. Most prominent among the statesmen who were mercantilists may be named Colbert, of France, Frederick the Great, of Prussia, and Cromwell, of England. Serra, an Italian, early in the seventeenth century presented a moderate and systematic statement of their views in a work entitled *A Brief Treatise on Causes which make Gold and Silver Abound where there are no Mines*. Thomas Mun, in England, a generation later, wrote a valuable treatise from the standpoint of the mercantilists, called *England's Treasure by Foreign Trade; or, the Balance of our Trade the Rule of our Treasure*, while Sir James Steuart's *Inquiries into the Principles of Political Economy*, published in 1767, may be regarded as closing the development of the theory of mercantilism. The one idea common to all mercantilists was this: a nation ought to strive to export a quantity of goods of greater value than it imports, in order that the difference may be imported in gold and silver and the home supply of the precious metals increased. Everything else was subordinated to this policy.

A favorable balance of trade was the aim, and we call their policy "the balance of trade theory." Tariffs were laid with this in view and protectionism was encouraged ; yet it was something different from modern protectionism. It was the avowed aim of the mercantilists to make both agricultural products and labor cheap, in order that manufactured articles might be cheap and a large sale of them abroad effected. The exportation of raw material was often entirely prohibited.

The Physiocrats.—The physiocrats were the first to present a rounded-out system of economic doctrine, and may thus be called the founders of our science. Quesnay, a physician, Gournay, a merchant, and Turgot, the statesman, are their three principal authors. The physiocrats taught the doctrine of natural laws, and as a consequence loudly proclaimed the maxim *laissez faire*, that is, that government should not interfere with private enterprise. They taught, furthermore, that agriculture was the only pursuit which added to the wealth of the country, and that additions to wealth must come from pure economic rent. They advocated in consequence the doctrine that all other taxes should be abolished and all taxes levied on rent. All taxes must, they thought, in the end come out of rent anyway, and it was better that the landlord should pay them at once instead of waiting until they had passed through five or six hands and various profits had added to their amount. The physiocrats were ardent champions of free trade.

Adam Smith.—Adam Smith, of Scotland, published in 1776 the most influential economic treatise ever written. It was called *The Wealth of Nations*. Adam Smith is usually, though perhaps without justice to the physiocrats, called the father of political economy. His writings, critically examined, are found to be very similar to those of the physiocrats, but further developed and modified by his Scotch training and habit of mind. We find in Adam Smith free trade, but less extremely stated ; the doctrine of non-interference, but with more careful limitation ; and the doctrine of natural

laws and harmony of the working of the selfish interests, yet stated more guardedly. Adam Smith, however, regards all industrial pursuits which are concerned with material things as truly productive, and does not propose to limit all taxes to rent, although when one goes through with the list of taxes which he rejects it is found that not many things save rent are left to be taxed.

Malthus.—Malthus published at the close of the last century his celebrated work, *The Theory of Population*, in which he advocated the Malthusian theory already explained. This was his main contribution to the evolution of economic science.

Ricardo.—Ricardo's principal work is called *Principles of Political Economy and Taxation*. It was published in 1817, and in it Ricardo elaborates, although he did not originate, the usually received doctrine of rent, which is substantially the one explained in this book, and called the Ricardian doctrine of rent. Rent, he said, is due to the niggardliness and not to the bounty of nature, and otherwise his doctrines had a pessimistic tinge, as when he teaches the natural diversity of interest between wage-receivers and profit-makers, and the antagonism between the interests of landowners and all other classes of society. Personally he was a kind man, and undoubtedly sincerely devoted to the advancement of humanity, although he is considered so hard-hearted as an economist. Ricardo is remarkable for his extreme development of the abstract deductive method, and it is noteworthy that this development is not in the writings of a professional scholar, but in the work of one of the most successful bankers and brokers of his day. Socialists claim that developing still further, or to their logical outcome, the teachings of Ricardo they arrive at socialism, and Ricardo ranks high among scientific socialists.

John Stuart Mill.—John Stuart Mill, who lived from 1806 to 1873, closed one period in the development of economic science and began another in England. He started as a thoroughgoing follower of Ricardo, but added so much to

the Ricardian doctrines that his treatise became largely new. The old and new do not harmonize, however, and the result is a work, one of the most valuable of modern times, and yet full of inconsistencies.

While other writers since Mill have admirably stated the views of this school, notably Professor J. E. Cairnes, whose writings are a good example of terse statement and concise reasoning, Mill will, doubtless, always be regarded as the culmination of this school, which is usually known as the English deductive or classical school. Most of the work of the school was deductive; that is, they reasoned by singling out a few main facts of the external physical world and human nature familiar to all and showing how men must act under the guidance of these laws. None of these economists pretended that the few laws which they considered were the whole of human nature, though they have sometimes been interpreted as if they did so; but they thought that the great multitude of motives which influenced men were too complex to be analyzed, and only one or two (chiefly self-interest) could "be reduced to any assignable law." It is plain that such a system of economics was highly ideal and never realized in actual life. The exceptions to its rules seemed more numerous than the cases to which the rules applied. Men could not long be content with an economics which told them one thing while life constantly told them something different, and often very different. The result was a reaction toward a fuller recognition of the real facts of life. This reaction gave rise to the historical school.

The Historical School.—About 1850 three young Germans, Roscher, Knies, and Hildebrand, vigorously assailed the doctrines of the classical school. They went back of the old premises—self-interest, private property, demand and supply—and analyzed and explained them. Tracing out historical development, they naturally came to the conclusion asserted by Knies that economic policies were not absolutely but only relatively true. There are two ways in which a doctrine may be stated absolutely. We may claim that it is good for

all time (perpetualism), and we may claim that it is good for all places (cosmopolitanism). Both of these Knies denied, holding that policies are only relatively good and bad; that policies must vary with time and place. The Germans thus took a new attitude with respect to free trade and protection, holding that neither was absolutely good nor absolutely bad, but that the correct policy for a country cannot be told without an acquaintance with the particular circumstances of the country.

The historical view has sometimes tended to fatalism. The relative justification of what exists has at times become almost an absolute justification, and one might think that whatever has been was at the time the best, and that mistakes have not been made. There has been a reaction against such extremes. There are different tendencies among German economists, and the term historical school applies to them only when taken in a very broad sense.

In its extreme form this school has sometimes disparaged economic theory altogether, claiming that for the present at least all our attention should be devoted to history and no attempt made to reach even tentative conclusions. Such extreme views have found little general acceptance.

The historical school has had many followers, especially in Germany and Italy, but latterly also in America and England. The chief of the moderate school, which favors deductive as well as inductive study, is, undoubtedly, Professor Wagner, of Berlin. The leader of the more extreme historical school, which gives almost exclusive attention to economic history, is Professor Schmoller, also of Berlin. Arnold Toynbee, in England, lived barely long enough to make a beginning in this line, but he is being vigorously followed up in his work. Other economists, like Professors Marshall and Sidgwick, occupy middle ground, thus endeavoring to unite English and German thought.

The German writers, while not failing by any means to use the deductive method, and not neglecting altogether pure theory, laid chief emphasis upon inductive methods, and

gave their attention successfully to the description of institutions and the collection of a vast mass of historical and statistical facts. It was not unnatural that at a later date the emphasis should be turned from induction to deduction and an effort made to utilize more fully the empirical knowledge gained. The facts, indeed, needed to be arranged and interpreted. What do they mean? was the question suggesting itself. Furthermore, the extreme position taken by a few historical economists tended in itself to produce a reaction, but this was a minor factor. It has fallen to the Austrian school, as it is called, to take the next great step forward in the development of economics.

SUMMARY.

1. The mercantilist policy was developed in the sixteenth century and continued till late in the eighteenth. It was a State policy rather than an economic school.

2. It aimed at an excess of exports over imports, with a view to increasing the supply of the precious metals.

3. The physiocrats, succeeding the mercantilists, reduced economic thought much more nearly to a science. They taught that agriculture alone was productive, and advocated a single tax on rent.

4. Adam Smith, the "father of political economy," developed and modified the doctrines of the physiocrats. He advocated free trade and non-interference on the part of government.

5. Malthus developed the theory of population, holding that population tends to increase faster than subsistence.

6. Ricardo elaborated the doctrine of rent, and emphasized to excess the use of the deductive method in economics. His writings have a pessimistic tendency.

7. John Stuart Mill began as a follower of Ricardo, but much modified his views, laying the foundation for a new school of economic thought.

8. The historical school arose in Germany about 1850. It emphasized the inductive method and denied the universal and eternal applicability of any economic system.

9. This school has been most developed in Germany and Italy, but has found followers in other countries.

10. The extreme opposition of some members of this school to deduction has in turn produced a reaction in favor of a new deductive school.

QUESTIONS.

1. What were the mercantilists? Where did the policy originate? Who were its principal advocates? What were their views? Were they right? Why?

2. Where did the physiocrats arise? How did they differ from the mercantilists? What was their cardinal doctrine? their central idea as regards State policy? Were they right? Why?

3. With which school does Adam Smith stand most closely related? Had he any views in common with the other? Mention his principal doctrines.

4. What was the contribution of Malthus to economics?

5. How did Ricardo differ from Adam Smith? What was his characteristic as regards spirit? as regards method? What doctrine was elaborated by him?

6. Describe as fully as possible the relation of John Stuart Mill to the foregoing, as well as to his successors.

7. Where did the historical school originate? Who are its chief representatives? What is the fundamental principle of the school? How does Professor Schmoller interpret this principle? What has been the result?

LITERATURE.

Ingram, J. K. : *History of Political Economy*. Especially good for this period.

Blanqui, J. A. : *History of Political Economy in Europe*. Hardly up to date.

Smith, Adam : *The Wealth of Nations*.

Malthus, T. R. : *Principles of Political Economy*.

Bonar, J. : *Malthus and his Work*.

Mill, J. S. : *Principles of Political Economy*.

Cairnes, J. E. : *Character and Logical Method of Political Economy ; Essays on Political Economy ; Principles of Political Economy*.

Sidgwick, H. : *Political Economy ; Scope and Method of Economic Science*.

Keynes : *Scope and Method of Political Economy*.

Ricardo, D. : *Principles of Political Economy and Taxation*.

Patten, S. N. : *The Interpretation of Ricardo*.

Ashley, W. J. : *Introduction to English Economic History and Theory*.

Toynbee, A. : *The Industrial Revolution in England*. Chapters on Ricardo

CHAPTER IV.

RECENT ECONOMIC WRITERS.

The Austrian School.—Perhaps no one has a better right to be called the founder of this school than Professor Karl Menger, of the University of Vienna, and the school is sometimes named after him, the Menger school. Next to Professor Menger the two names most prominent in the Austrian school are those of Professor von Wieser and Professor von Böhm-Bawerk, whose two books, *Capital and Interest* and the *Positive Theory of Capital*, admirably translated into English by Professor Smart, have made an epoch in economic thought, and have done more than any other works to make the Austrians known in England and the United States.

The Austrians claim that their province is theory in the strictest sense of the word, but they have given, perhaps, chief attention to methods. They agree with the historical economists in the inadequacy of the English political economy, but hold that this inadequacy was not due to the use of the deductive method, but to the imperfect use of deduction. They seek to analyze carefully, to frame exact conceptions, and, making use of the mistakes and shortcomings of the English deductive economics, to substitute therefor a more highly developed system of economics.

The most important portion of their researches relates to value which is based upon the theory of final utility, or, as it is better called, marginal utility. Their theory of value, which is substantially that presented in the present work, lies at the basis of their other theories. The theory of marginal utility was advanced at about the same time by Professor Jevons, of England, the Swiss economist, Professor Walras, and the

Austrian, Professor Menger; but it has been developed in its ramifications by the Austrians. They use it to show how products are distributed among the factors of production. Distribution follows from what they call the "law of complementary goods." When various factors or goods contribute to the same end they are complementary, and how is value distributed among them? This is the problem of distribution. The treatment of capital in the present work is to some extent taken from them, and the treatment of interest is that which is presented by Dr. von Böhm-Bawerk, in which, however, the others do not wholly agree.

The Austrians have been a leading force in producing what is not inaptly termed a *renaissance* in theory. Their influence has become strong in Holland, Denmark, Sweden, Italy, and the United States. It is, in fact, an influence which must be strongly felt in the further development of economics. It would seem to the writer, however, a mistake to bring it into too sharp an antagonism to the German historical school. The Austrians have learned much from the Germans, and some of their leaders have been pupils of Professor Knies, of Heidelberg, whose influence upon the newer development in America, as well as Austria, has not been sufficiently appreciated. One who reads the works of Professor Knies with care, especially one who has been one of his students and looks over the notes taken while a student, cannot fail to see how much is due to this German scholar, keen in analysis and painstaking in definition; but this does not imply any failure to accord the highest credit to the Austrians. It is natural in a social science to lay emphasis first on the deductive, then on the inductive, and then again on the deductive method. A collection of facts may well be followed by careful utilization of the facts deductively, and this again at a subsequent period by a new emphasis upon descriptive and statistical work. The Austrians, then, ought to be regarded as those who are continuing the valuable work of the Germans.

The Subjective School.—Among many American econ.

omists who are contributing to the advance of this line of thought Professor Patten, of Philadelphia, deserves prominent mention. Insisting upon the necessity of studying the *subjective* causes of economic phenomena, he is helping to found a subjective school of economics, laying chief stress on man, and subordinating more than ever has been done before external nature to man. He has rendered especial service to the science in the emphasis he has laid on the study of consumption and changes brought about in all the conditions of economic life by changes in man's habits of consumption. This is a field in which little has been done, and the importance of which can be scarcely overestimated, though the obscurity of its phenomena renders their study difficult. Economic writers have frequently referred to this subject, and then made no use of it in the development of their systems, because it was something apart from the main current of their thought. It is different with Professor Patten. The theory of consumption is with him the root doctrine out of which his entire economic system naturally grows. The two works of his to be specially mentioned in this connection are his *Consumption of Wealth* and his *Theory of Dynamic Economics*. Another truth emphasized by this writer is the importance of studying the laws of change in human society rather than simply the laws which govern it in equilibrium.

In this place especial attention is called to Professor Patten's theory of prosperity. It is, in brief, as follows: The prosperity of society is measured by surplus utility, which is the difference between the costs and the utilities of goods. Cost means sacrifice from the social standpoint, the pain, the economic energy expended. Utilities we have already considered. Whatever increases utilities, other things being equal, increases social surplus; similarly whatever lowers costs, other things being equal, increases social surplus. What then are the causes increasing utilities? Variety of consumption as seen in increasingly harmonious consumption is one. A large number of commodities suitably related in consumption increases pleasure derived from consumption,

and therefore utilities. The consumption of commodities which give pleasure and sustain life at the same time increases pleasure over the consumption of articles which merely sustain life. Well-prepared food may thus be contrasted with poorly cooked food, beautiful garments with ill-fitting clothing, etc. The socialization of consumption is one of the most important means of increasing utilities. By this we understand the common use of goods and services. Paintings in public galleries afford indefinitely greater pleasure than the same pictures in a private house. Beautiful objects of nature have their utility increased by socialization. When the land in New York surrounding Niagara Falls was purchased by the State the utilities of this natural wonder were increased. Coöperation in consumption increases utilities. This is a form of socialization. Men combine to secure services. The post office is an illustration. The same cost secures far greater utilities by coöperation in transportation. Musical entertainments, schools, public worship, and many other departments of our economic life, and, in fact, of our social life in general, serve as illustrations. Inclusive rather than exclusive pleasures must be our aim. Fuller utilization of existing resources by economies increases the social surplus as well as the utilization of new resources. A larger command of natural forces increases the supply of utilities, and thus the surplus.

On the other hand, a decrease of costs may be brought about in many ways, which may be summed up under the general head "Better Industrial Organization." The division of labor so well described by Adam Smith is one form which this improvement takes. The territorial division of labor is another. Improved industrial leadership is still another. Increased capital facilitates industrial organization.

This increasing surplus is a monopoly fund, and this monopoly is found everywhere in our industrial field, and the problem of a better distribution finds its heart in the disposal of this surplus. What use shall be made of it? It is chiefly a social product to be socially controlled, and wise taxation

is one of the means advocated by Professor Patten. Such taxation will favor the dynamic forces in society.

Perhaps the reader may be inclined to think that disproportionate space has been given to these new theories, but the author wishes to call attention to the fact that Professor Patten, starting out from a subjective treatment of consumption, reaches conclusions respecting monopoly similar to those presented in the present work. If these new views can be demonstrated to be correct they manifestly supplement and support the teachings with respect to monopoly which rest on a more inductive and objective basis of observation.*

The present outlook for economics is bright. Broader views, more comprehensive inquiries, and more practical conclusions now characterize its presentation. One of the most encouraging signs of all, however, is the increase of general interest on the part of the public, which results in larger stimulus to those engaged in the study. The time was when the study of the classic languages was the center of human learning and the chief means of education; and with right, for no other line of knowledge presented so carefully formulated and accurate results. Proficiency in these branches measured largely the standing of institutions of learning. Years ago this supremacy was, in a measure, transferred to the physical sciences; and again with reason, for their importance and the accurate results obtained merited the attention they received. May we not expect, in view of the immensity of the social problems now before us demanding speedy settlement, that the science of society, and the study of those relations which we are called upon to perfect, will, without disparagement of previous subjects of interest, receive the primary attention of the earnest and thoughtful public?

* For further elaboration in simple form see *Economics, Elementary Presentation of the New Theories of Consumption and Production*, by E. F. Devine, of the University of Pennsylvania. This is a thesis which originally appeared in *University Extension*, the organ of the American Society for the Extension of University Teaching, in the number for November, 1891, and the following.

SUMMARY.

1. The Austrian school is a new deductive school developing especially the theory of value from the idea of marginal utility.
2. The movement was begun simultaneously in Austria, Switzerland, England, and perhaps in other countries, but has been best worked out in Austria.
3. This development, though seemingly opposed to the historical movement in Germany, is really its legitimate outcome.
4. Professor Patten, of Philadelphia, is prominent in developing a new theory of economics based on an analysis of consumption and emphasizing the subjective elements of economic life.
5. The present prospect for rapid development in economic science is bright.

QUESTIONS.

1. What are the characteristic doctrines of the Austrian school? What has the school in common with Ricardo? with other schools?
2. Who are the representatives of this school? Where did it start? What conclusion can be drawn from this?
3. What has Professor Patten in common with the Austrian school? How do they differ? What is essentially new in his treatment of economics?

LITERATURE.

The works of the Austrian school have been cited at the close of the chapters on value. Professor Patten has written numerous monographs, *Premises of Political Economy*; *The Consumption of Wealth*; *Stability of Prices*, and *Theory of Dynamic Economics* being the most important. Professor J. B. Clark's *Philosophy of Wealth* should also be studied in this connection.

Of especial importance in recent discussions of economics is the periodical literature of the last few years. British publications especially worthy of mention are the *Economic Journal*, published by the British Economic Association, and the *Economic Review*, published by the Oxford University branch of the Christian Social Union. In America the prominent publications are the *Annals of the American Academy of Political and Social Science*, the *Quarterly Journal of Economics*, the *Political Science Quarterly*, and the monographs of the American Economic Association.

APPENDIX.

**SUBJECTS FOR ESSAYS, DISCUSSIONS, AND DE
BATES.—COURSES OF READING.—BIBLI-
OGRAPHY.—INDEX.**

SUBJECTS FOR ESSAYS, DISCUSSIONS, AND DEBATES.

NOTE.—The numbers refer to works mentioned in the bibliography. The references are by no means complete.

THE following list is but a suggestion of the possibilities of subjects for debates and essays in the field of Economics and Sociology. No attempt has been made to arrange them with rigorous system or to state them in the best form. Obviously, the form of statement will be determined by the use to which they are put. Students are strongly advised to study local conditions and institutions, economic and social. Every community contains the essential elements of our modern civilization in miniature, and an attentive study of it in this concrete form is of the highest educational value, and often results in valuable contributions to science. A large number of the subjects enumerated may be thus studied. Thus, if the student lives in a rural district, let him study local land values, the profits of agriculture, farmers' indebtedness, changes of farming methods, use of farming machinery, transportation of farm produce, farmers' organizations, etc., all with reference to his own locality. If he lives in a manufacturing town let him study the factory problem in the same way: the extent to which women and children are employed, the restrictions and regulations to such employment, and the efficiency with which they are enforced. Or he may investigate the local railroad problem, facilities offered, freight rates, as compared with through rates, railroad crossings in town, the precautions taken for safety, accidents which have occurred, and their cause. If more than one line of railroad, are there union depots? what facilities for the traveling public? and so on indefinitely. In all such efforts the accurate investigation of facts cannot be too strongly insisted upon as a condition of profitable study.

BIOGRAPHICAL AND PERSONAL.

Moses as an Economist.

John Law and his schemes.

Sketch of the life of Adam Smith. 301.

Sketch of the life of J. S. Mill.

Alexander Hamilton as an Economist. 155.

Robert Owen, his ideas and efforts.

Benjamin Franklin as an Economist. 122.

Thomas Jefferson as an Economist.

Henry Clay as an Economist.

Arnold Toynbee as an Economist and Social reformer. 327

Ferdinand Lasalle, his life and work. 169, 190.

Karl Marx and his theories.

Henry C. Carey, his life and work.

August Comte and his work in Sociology.

Rousseau and his Social Philosophy.

LABOR AND LABOR ORGANIZATIONS.

The economic aspects of slavery.

The Wages System, its history, merits, and possible substitutes.

The Factory System, its origin and results. 320, 369.

The Sweating System.

Women wage-earners, their condition and needs.

Child labor, its value and cost. 146.

Convict labor, its necessity and evils.

Low wages and their remedies. 103.

Piecework, its advantages and dangers.

Sunday work, its necessity and regulation.

The Eight-hour Day, the agitation for it and its results. 149, 255, 341.

Coöperation, its history and prospects. 1, 3, 111, 163.

Profit-Sharing, its history and possibilities. 137, 138, 140, 275.

Workingmen's budgets or accounts of receipts and expenditures.

Old Age Pensions in England.

Labor Organizations, their function and dangers. 108.

Trades Unions and Strikes, their relation to the laborer, the employer, and society. 82, 157.

Conciliation and Arbitration, private and governmental. 352, 353, 354.

The Knights of Labor, their history, purpose, and prospects.

The Homestead Strike, its history and lessons.

The Farmers' Alliance and the Patrons of Husbandry. 96.

Factory Legislation in the American States, its development and needs.

LAND ; FOOD SUPPLY.

The Rise and Fall of Land Values and the social utility of the Land Speculator. 74, 125, 127, 156.

Diminishing Returns and soil deterioration in the United States. 92.

Land Tenure ; Systems in Europe and America.

Forests in the United States, their destruction and reconstruction. 118, 119.

Our Public Domain, its origin, management, and possibilities. 15, 164.

Irrigation in the United States, its necessity and the policy to be pursued. 154, 162.

How Great Cities are fed.

Fish Culture in the United States and its economic significance.

MONEY, BANKS, AND BANKING.

Money, its origin and varieties.

The Ricardian quantitative theory of money.

Money and its possible bases of value. 9, 339.

Bimetallism. 16, 66, 68, 289.

The History of Silver Money in the United States. 318.

The Demonetization of Silver in the United States.

Paper Money, its origin, history, varieties, and prospects. 189, 339.

The French Assignats.

Banking, its different systems. 100, 123, 136, 250, 339.

The National Banking System ; Reasons for its establishment, and difficulties in the way of its maintenance.

Postal Savings Banks, their history in other countries, their desirability and feasibility in the United States.

The Bank of England, its history and importance. 19, 186, 263.

Clearing-house, its function and workings.

Building and Loan Associations.

Credit, its history and present importance.

Usury and usury laws, their history and present desirability.

COMMERCE, MONOPOLIES, ETC.

The Decline of American Shipping, its causes and results.
Foreign Exchange.

Corners, futures, options, etc., their importance and economic effects.

Industrial Depressions, their causes and remedies.

Monopolies, their increase and prospects.

Trusts, their causes and prospects.

Electric Lighting in Cities.

The cost and value of advertising to society.

INSURANCE.

Insurance, its purpose and importance.

Insurance under private and under public auspices.

State insurance of workmen in Germany. 319, 356.

The Benefit or Insurance Features of Labor Organizations.

TRANSPORTATION.

Good Roads, their cost and value.

Railway Transportation, its growth and its dangers. 81, 112, 113, 168.

The Prussian Railway System.

The Hungarian Zone System of railway fares. 361.

The Interstate Commerce Act, its purpose and workings. 71, 152, 285.

River and Harbor Bills, their history and its lessons.

PROBLEMS OF SOCIAL CONDITION.

The cost and value of luxury to the rich, to the poor. 260.

How a laborer's family of five persons lives in the writer's community.

Housing of the Poor in Cities, needed improvement and the means necessary to effect it. 42, 62, 260.

Clubs for working girls, their history and value.

The Economic vs. the Moral Causes of Poverty. 42, 116.

Pauperism and its Treatment. 116.

Social Legislation in the writer's State.

The Negro population question in the United States.

TAXATION AND TARIFF.

Adam Smith's views of Taxation.

Taxation of land, its relation to other taxes and its effects on industry. 85.

Taxation Systems in American States. 2, 114.

Direct and Indirect Taxation compared ; the merits of each and their adaptability to special situations. 85.

The history of the Income Tax in the United States.

The Internal Revenue System of the United States, its history and present workings.

The English Corn Laws, their history and results.

Modern Protectionism—theory and justification. 321, 322.

Tariff Legislation in the United States, its history and the changing arguments used to support it. 64, 77, 314, 359.

The Relation of the Protective Tariff to Wages.

THE STATE IN INDUSTRY.

The Economic Functions of Government.

Salt and Tobacco Monopolies in France.

The Monopoly of Alcoholic Beverages in Switzerland.

The Telegraph, its management by public and by private enterprise.

Internal Improvements, their history and prospects.

National Workshops in France in 1848.

The Independent Treasury System of the United States.

SOCIALISM AND COMMUNISM.

Socialism, its gains and its losses. 10, 86, 132, 138, 148, 183, 193.

Communistic Experiments in the United States.

Fourierism in the United States.

Icaria and Amana.* 291.

Christian Socialism, its relation to Christianity and to Socialism. 132, 138, 288.

The Function and Liberty of the Press under Socialism.

GENERAL THEORY.

The theory of Value, its development in various authors.

Mill's theory of Minimum Profits.

The Malthusian theory of Population and its critics.

The Wage-fund theory, its basis and history.

The Balance of Trade theory, its history and fallacies.

Wants, their development and values.

Possible Substitutes for Competition.

Profits, their elements and justification.

Economic Laws, their nature and generality.

Labor and its relation to wealth, to value, to monopoly.

The formation and growth of capital. 72, 131, 147.

The Ethics of Trade, conception in various ages.

Climate as a determinant of civilization.

MISCELLANEOUS.

Primitive Property, its laws and origin.

The great plague of 1348 and its economic effects.

The Irish famine of 1848, its economic causes and lessons.

Dwelling houses in village and country.

Cost of bad cookery in the United States.

Cost of intoxicants to the community in which the writer lives.

The Economic functions of the Church.

Economic Effects of changes in fashion.

* Communistic societies in United States.

COURSES OF READING.

IN the bibliographies at the end of the chapters and in that at the end of the book have been included both books for reading and works for general reference. The following courses of reading are designed to serve as a practical guide to those desiring to read on the main topics for study treated in this volume. The first group of works mentioned in each case includes simpler works of a relatively untechnical character, and constitutes, therefore, in a way, an elementary course. Those following constitute a supplementary and more detailed course.

ECONOMICS.

Walker, F. A. : *Political Economy, Elementary Course, and Briefer Course.*

Jevons, W. S. : *Primer of Political Economy.*

Walker, F. A. : *Political Economy, Advanced Course.*

Clark, J. B. : *The Philosophy of Wealth.*

Mill, J. S. : *Principles of Political Economy.*

Cairnes, J. E. : *Some Leading Principles of Political Economy Newly Expounded.*

Jevons, W. S. : *The Theory of Political Economy.*

Marshall, Alfred : *Principles of Economics.*

Smart, William : *Introduction to the Theory of Value.*

Böhm-Bawerk : *Capital and Interest ; Positive Theory of Capital.*

Patten, S. N. : *Theory of Dynamic Economics.*

It scarcely need be said that those who are interested in the development of economics should read the works of

Adam Smith, Ricardo, and Malthus. Their work was of a kind that may be supplemented but never superseded or forgotten. To those who read German the works of Schönberg and Wagner are especially recommended.

LAND, AND THEORIES CONCERNING IT.

Walker, F. A. : *Land, and its Rent.*

George, Henry : *Progress and Poverty.*

Maine, Sir Henry : *Early History of Institutions ; Village Communities in East and West.*

Laveleye, E. de : *Primitive Property.*

Rogers, J. E. T. : *History of Agriculture and Prices in England.*

The works of Mill and other standard economists contain valuable discussions on the subject. No study of land problems can be even approximately complete, however, without an examination of foreign works, above all Wagner's, *Die Abschaffung des privaten Grundeigentums.*

MONEY AND BANKING.

Walker, F. A. : *Money, Trade and Industry.*

Jevons, W. S. : *Money and the Mechanism of Exchange.*

Bagehot, W. : *Lombard Street.*

Nicholson, J. S. : *Money and Monetary Problems.*

Knox, J. J. : *United States Notes.*

Sumner, W. G. : *History of American Currency.*

Horton, S. D. : *Silver in Europe.*

Laughlin, J. L. : *History of Bimetallism in the United States.*

Atkinson, E. : *Bimetallism in Europe.*

Soetbeer, A. : *Precious Metals.*

Gilbart, J. W. : *History, Principles, and Practice of Banking.*

FINANCE.

Bastable, C. F. : *Public Finance*.

This can hardly be called an elementary work, but it is not difficult, and is the best general work in English upon the subject.

Ely, R. T. : *Taxation in American States and Cities*.

Adams, H. C. : *Public Debts*.

Kearny, J. : *Sketch of American Finance*, 1789-1835.

The works of Wagner, Cohn, Roscher, and Leroy-Beaulieu are invaluable to all who can read them.

TARIFF.

Mason, D. H. : *Short Tariff History of the United States* (protectionist).

Taussig, F. W. : *Tariff History of the United States*, 1789-1888 (tariff reform).

Ely, R. T. : *Problems of To-day*.

Carey, H. C. : *Harmony of Interests* (a protectionist classic).

Patten, S. N. : *Economic Basis of Protection* (protectionist).

Sumner, W. G. : *Protectionism the Ism that Teaches that Waste makes Wealth* (free trade).

Wells, D. A. : *Practical Economics* and numerous Tariff Reform monographs.

The pamphlet and periodical literature on this subject is enormous.

SOCIALISM.

Bellamy, E. : *Looking Backward*.

Gronlund, L. : *The Coöperative Commonwealth*.

Ely, R. T. : *French and German Socialism; Recent American Socialism*.

Nordhoff, C. : *Communitistic Societies of the United States*.

Kirkup, T. : *Inquiry into Socialism*.

Rae, J. : *Contemporary Socialism*.

Laveleye, E. de : *Socialism of To-day*.

Marx, Karl : *Capital.*

Schaeffle, A. E. F. : *Quintessence of Socialism.*

SOCIOLOGY.

Riis, Jacob A. : *How the Other Half Lives.*

Ely, R. T. : *Social Aspects of Christianity.*

Bascom, J. : *Sociology.*

Booth, C. : *Life and Labor in East London.*

Spencer, H. : *Social Statics ; The Study of Sociology ; Principles of Sociology.*

Ward, L. F. : *Dynamic Sociology.*

LABOR.

Gladden, Rev. W. : *Working People and their Employers.*

Toynbee, Arnold : *The Industrial Revolution in England.*

Ely, R. T. : *The Labor Movement in America.*

Rogers, J. E. T. : *Six Centuries of Work and Wages.*

Wright, Carroll D. : Numerous monographs and Reports of value.

Commissioner of Labor : *Third Annual Report, Strikes and Lockouts.*

Barnreither, J. M. : *English Associations of Workingmen.*

Guntton, G. : *Wealth and Progress.*

Walker, F. A. : *The Wages Question ; Coöperation and Profit-Sharing.*

Ackland, A. H. D., and Jones, B. : *Workingmen Coöperators.*

Gilman, N. P. : *Profit-Sharing between Employer and Employee.*

PAUPERISM AND CRIME.

Brace, C. L. : *Dangerous Classes in New York.*

Booth, General W. : *In Darkest England and the Way Out.*

Dugdale, R. L. : *The Jukes.*

Wines, E. C. : *State of Prisons and Child-Saving Institutions.*

Fawcett, H. : *Pauperism, its Causes and Remedies.*

BIBLIOGRAPHY.

THE bibliography here given is intended to be adequate to the wants of any college student. It, however, by no means covers all the ground of economic literature. Only such works are included as will probably be helpful. Foreign works, when translated into English, are mentioned only in the latter form. For a more complete bibliography of this and allied branches see Bowker and Hes, *Reader's Guide in Economic, Social, and Political Science*, an excellent work to which reference will occasionally be made in the following pages (B. and I.). The more important economic journals are mentioned at the end.

1. ACKLAND, ARTHUR, and JONES, B., *Workingmen Coöperators, what they have done and what they are doing, and an account of the Artisans' Coöperative Movement in Great Britain*. Cassell, New York.
2. ADAMS, H. C., *Taxation in the United States, 1789-1815*. Johns Hopkins University Publications, Baltimore, 1884.
3. — *Relation of the State to Industrial Action*. American Economic Association, Baltimore, 1887.
4. — *Public Debts, an Essay in the Science of Finance*. 2d ed. D. Appleton & Co., New York.
5. — *The Interpretation of the Social Movements of Our Time*. International Journal of Ethics, Philadelphia.
6. ADLER, G., *Die Grundlagen der Karl Marx'schen Kritik der bestehenden Volkswirtschaft*. Tübingen.
7. — *Evolution of the Socialistic Programme in Germany*. Economic Journal, vol. i. Macmillan & Co., London.
8. ANDREWS, E. B., *Institutes of Economics*. Silver, Burdett & Co., Boston.
9. — *An Honest Dollar*. American Economic Association, Baltimore.
10. — *Economic Reform Short of Socialism*. International Journal of Ethics, Philadelphia.
11. ASHLEY, W. J., *Introduction to English Economic History and Theory*. G. P. Putnam's Sons, New York.
12. — *General Booth's Panacea*. Political Science Quarterly, New York.
13. ATKINSON, E., *The Margin of Profits, how it is now divided, what part of present hours of labor can be spared. A controversy which resulted is included*. G. P. Putnam's Sons, New York.
14. — *Labor and Capital Allies, not Enemies*. Harper & Brothers, New York.
15. — *Our National Domain*. 2d ed. A. Williams & Co., Boston.
16. — *Bimetallism in Europe*, U. S. Consular Report No. 87. Washington, D. C. A very valuable document on the subject.
17. BAGEHOT, WALTER, *The Depreciation of Silver*. H. S. King & Co., London.
18. — *International Coinage, a practical plan of assimilating English and American money as a step toward universal money*. 2d ed., enlarged. Longmans, Green & Co., London.

19. — Lombard Street. New ed. An excellent and graphic account of banking. Charles Scribner's Sons, New York.
20. — Postulates of English Political Economy. G. P. Putnam's Sons, New York.
21. BARNREITHER, J. M., English Associations of Workingmen. Translated by Alice Taylor. Swan, Sonnenschein & Co., London.
22. BASCOM, J., Sociology. A valuable statement of general principles. G. P. Putnam's Sons, New York.
23. BASTABLE, C. F., Public Finance. The best treatise in English. Macmillan & Co., New York.
24. — Theory of International Trade, with some of its applications to economic policy. Simpkin, Marshall & Co., London.
25. BASTIAT, F., Essays on Political Economy. G. P. Putnam's Sons, New York.
26. — Sophisms of Protection, with preface by Horace White. G. P. Putnam's Sons, New York.
27. BELLAMY, E., Looking Backward. Houghton, Mifflin & Co., Boston and New York; Ticknor & Co., New York; The Truth Seeker Co., New York.
28. BEMIS, EDWARD W., Municipal Ownership of Gas in the United States. American Economic Association, Baltimore.
29. BENTLEY, A. T., The Condition of the Western Farmer as Illustrated in the History of a Nebraska Township. Johns Hopkins University Studies in Historical and Political Science, Baltimore.
30. BLACK, R. W., Vice and Immorality. International Journal of Ethics, Philadelphia.
31. BLANC, LOUIS, L'organization du Travail. Paris.
32. BLANQUI, J. A., History of Political Economy in Europe. Translated by Emily J. Leonard, with introduction by David A. Wells. Good, but not up to date. G. P. Putnam's Sons, New York.
33. BLUNTSCHLI, J. K., Theory of the State. Translated from the sixth German edition by R. Lodge. Macmillan & Co., New York.
34. BÖHM-BAWERK, E. von, Capital and Interest; a critical history of economic theory. Translated with a preface by Wm. Smart. An admirable work. Macmillan & Co., New York.
35. — Positive Theory of Capital. *Ibid.*
36. — Historical vs. Deductive Political Economy. Annals of the American Academy of Political and Social Science, Philadelphia.
37. BOLLES, A. S., Financial History of the United States. A book of good material miserably arranged. Homans & Co., New York.
38. — The National Bank Act and its Judicial Meaning. Homans & Co., New York.
39. — Practical Banking and Bankers' Commonplace Book. Homans & Co., New York.
40. BONAR, JAMES, Malthus and his Work. Macmillan & Co., and Harper & Brothers, New York.
41. — The Value of Labor in Relation to Economic Theory. Quarterly Journal of Economics, Boston.
42. BOOTH, C., Life in East London. An expensive but exceedingly valuable book. Williams & Norgate, London.
43. BOOTH, GENERAL W., In Darkest England and the Way Out. Funk & Wagnalls, New York.
44. BRACE, C. L., Dangerous Classes in New York. Wynkoop & Hallenbeck, New York.

45. BRASSEY, T., *On Work and Wages*. G. P. Putnam's Sons, New York.
46. BRENTANO, LUJO, *On the History and Development of Guilds and the Origin of Trades Unions*. Trübner, London.
47. — The Relation of Labor to the Law of To-day. G. P. Putnam's Sons, New York.
48. BROWNE, T. E., *Studies in Modern Socialism and the Labor Problem*. D. Appleton & Co., New York.
49. BRYCE, JAMES, *The American Commonwealth*. Revised ed. Macmillan & Co., New York.
50. Bureau of Statistics, *Annual Report on the Foreign Commerce, Navigation, Immigration, and Tonnage of the United States*; also *Quarterly Report on the same*. Washington, D. C.
51. — *Annual Report on Domestic Commerce of the United States*. Washington, D. C.
52. — *Table of Prices of Commodities, and Immigration for a Series of Years*. Washington, D. C.
53. — *Statistical Abstract of the United States*. Washington, D. C.
54. BURGESS, J. W., *Political Science and Comparative Constitutional Law*. 2 vols. Ginn & Co., New York.
55. BURNETT, J., *The Boycott as an Element in Trade Disputes*. *Economic Journal*, vol. i. Macmillan & Co., London.
56. BYLES, SIR J. B., *Sophisms of Free Trade and Popular Political Economy Examined*. 5th American ed. H. C. Baird, Philadelphia.
57. CABET, E., *Voyage en Icarie*. Paris.
58. CAIRNES, J. E., *Character and Logical Method of Political Economy*. Harper & Brothers, New York.
59. — *Essays on Political Economy, Theoretical and Practical*. London, 1878.
60. — *Some Leading Principles in Political Economy Newly Expounded*. Harper & Brothers, New York.
61. CAMPBELL, SIR GEORGE, *Property in Land*. *Westminster Review*, February, 1890.
62. CAMPBELL, HELEN, *Prisoners of Poverty*. New York.
63. — *Prisoners of Poverty Abroad*. Boston.
64. CAREY, H. C., *Harmony of Interests, Agricultural, Manufacturing, and Commercial*. H. C. Baird, Philadelphia.
65. — *Principles of Social Science*. H. C. Baird, Philadelphia.
66. CERNUSCHI, H., *Nomisma*; or, "Legal Tender." D. Appleton & Co., New York.
67. CHEVALIER, EMILE, *Les Salaires au XIXième Siècle*. Arthur Rousseau, Paris.
68. CHEVALIER, MICHEL, *On the Probable Fall in the Value of Gold, the commercial and social consequences which may ensue, and the measures which it invites*. Translated by R. Cobden. D. Appleton & Co., New York.
69. — *La Monnaie*. 2d ed. Paris.
70. CHISHOLM, J. C., *Handbook of Commercial Geography*. Longmans, Green & Co., New York.
71. CLARK, FREDERICK C., *State Railroad Commissions, and How They May be Made Effective*. American Economic Association, Baltimore.
72. CLARK, J. B., *Capital and its Earnings*. American Economic Association, Baltimore.
73. — *The Philosophy of Wealth, economic principles newly formulated*. Ginn & Co., Boston.

74. — **Ethics of Land Tenure.** *International Journal of Ethics*, Philadelphia, October, 1890.
75. — **Law of Wages and Interest.** *Annals of the American Academy of Social and Political Science*, July, 1890, Philadelphia.
76. CLARK, J. B., and GIDDINGS, F. H., **The Modern Distributive Process; studies of competition and its limits, of the nature and amount of profits, and of the determination of wages in the industrial society of to-day.** Ginn & Co., Boston.
77. CLEVELAND, GROVER, **The President's Message of Grover Cleveland, 1887, with annotations by R. R. Bowker.** G. P. Putnam's Sons, New York.
78. CLUM, F. D., M.D., **Inebriety, its Causes, its Results, its Remedy.** *Cyclopedia of Temperance and Prohibition.* J. B. Lippincott & Co., Philadelphia.
79. COHN, GUSTAV, **Finanzwissenschaft.** F. Enke, Stuttgart.
80. — **System der National Ökonomie.** F. Enke, Stuttgart.
81. — **Die Englische Eisenbahnpolitik der letzten 10 Jahre.** Düncker & Humboldt, Leipsic.
82. Commissioner of Labor, **Third Annual Report, Strikes and Lockouts.** Washington, D. C.
83. COMTE, AUGUSTE, **Positive Philosophy.** Translated and condensed by Harriet Martineau. Trübner, London.
84. COSSA, LUIGI, **Guide to the Study of Political Economy.** Translated with preface by W. S. Jevons. Macmillan & Co., New York.
85. — **Taxation, its Principles and Methods, with introduction and notes by Horace White.** G. P. Putnam's Sons, New York.
86. COURTNEY, Hon. L., **Difficulties of Socialism.** *Economic Journal*, vol. i. Macmillan & Co., London.
87. CUNNINGHAM, WM., **Growth of English Industry and Commerce During the Early Middle Ages.** 2d ed. Macmillan & Co., New York.
88. — **The Guild Merchant in England.** *Quarterly Journal of Economics*, Boston.
89. DABNEY, W. D., **Public Regulation of Railways.**
90. DAVIS, C. W., **Why the Farmer is Not Prosperous.** *Forum*, April, 1890.
91. — **When the Farmer will be Prosperous.** *Forum*, May, 1890.
92. — **Exhaustion of the Arable Land.** *Forum*, June, 1890.
93. — **Probabilities of Agriculture.** *Forum*, November, 1890.
94. DEVINE, E. F., **Economics, Elementary Presentation of the New Theories of Consumption and Production.** Publications of the University Extension Department of the University of Pennsylvania.
95. DILKE, SIR CHARLES, **Problems of Greater Britain.** Macmillan & Co., New York.
96. DREW, F. M., **The Present Farmer Movement.** *Political Science Quarterly*, New York.
97. DRUMMOND, HENRY, **Tropical Africa.** Charles Scribner's Sons, New York.
98. DUGDALE, R. L., **The Jukes, a study in crime, pauperism, and heredity.** 4th ed. An invaluable book. G. P. Putnam's Sons, New York.
99. DÜHRING, E., **Kritische Geschichte der Nationalökonomie und des Socialismus.** 3d ed. Berlin.
100. DUNBAR, C. F., **The Theory and History of Banking.** G. P. Putnam's Sons, New York.
101. — **Laws of the United States relating to Currency and Finance from 1789 to 1890.** C. W. Sever, Cambridge, Mass.
102. DUNNING, W. A., **The Irish Land Question.** *Political Science Quarterly*, New York.

103. EDEN, SIR F. M., *State of the Poor; or, History of the Laboring Classes in England from the Conquest to the Present Period.* London.
104. ELLIS, HAVLOCK, *The Criminal.* Contemporary Science, No. 1. Charles Scribner's Sons, New York.
105. ELY, R. T., *The Past and Present of Political Economy.* Johns Hopkins University Publications, Baltimore.
106. ——— *Introduction to Political Economy.* Hunt & Eaton, New York.
107. ——— *Social Aspects of Christianity.* T. Y. Crowell & Co., New York.
108. ——— *The Labor Movement in America.* T. Y. Crowell & Co., New York.
109. ——— *French and German Socialism in Modern Times.* Harper & Brothers, New York.
110. ——— *Recent American Socialism.* Johns Hopkins University Historical Series, Baltimore.
111. ——— *German Coöperative Unions.* Atlantic Monthly, February, 1891. New York.
112. ——— *Economic Evils in American Railway Methods.* Harper's Magazine, August, 1886.
113. ——— *The Nature of the Railway Problem.* Harper's Magazine, July, 1886.
114. ELY, R. T., and FINLEY, J. H., *Taxation in American States and Cities.* T. Y. Crowell & Co., New York.
115. EVANS, C. H., *Import Duties from 1867 to 1883, inclusive.* Government Printing Office, Washington, D. C.
116. FAWCETT, H., *Pauperism, its Causes and Remedies.* Macmillan & Co., London.
117. FERNOW, B. E., *Need of a Forest Administration for the United States.* Salem Press, Salem, Mass.
118. FINK, ALBERT, *The Railroad Problem and its Solution; argument before the Committee on Commerce of the United States House of Representatives in opposition to a bill to regulate interstate commerce.* Washington, D. C., 1880. Also numerous other arguments on the same subject.
119. *Forestry in Europe,* United States Consular Report, Department of State. Government Printing Office, Washington, D. C.
120. FOURIER, C., *Œuvres Complètes.* A. Dupont, Paris.
121. FRANCISCO, M. J., *Review of the argument for Limited Post and Telegraph, by the Postmaster-General.* M. J. Francisco, Rutland, Vt.
122. FRANKLIN, B., *Essay on Political Economy, in his Works.* T. MacCoun, New York.
123. GALLATIN, ALBERT, *Considerations on the Currency and Banking System of the United States.* Philadelphia.
124. General Land Office, *Circulars showing the manner of proceeding to obtain title to the public lands, etc.* Washington, D. C.
125. GEORGE, HENRY, *Progress and Poverty.* United States Book Co., D. Appleton & Co., Henry George & Co., New York.
126. ——— *Social Problems.* Henry George & Co., New York.
127. ——— *The Land Question, what it involves and how it can be settled.* Henry George & Co., New York.
128. ——— *The Irish Land Question, an appeal to the land leagues.* D. Appleton & Co., New York.
129. ——— *Protection or Free Trade, an examination of the tariff question, with especial regard to the interests of labor.* Henry George & Co., New York.

130. GIDDINGS, F. H., *The Natural Rate of Wages*. Political Science Quarterly, December, 1887.
131. ——— *Theory of Capital*. Quarterly Journal of Economics, January, 1890.
132. ——— *The Ethics of Socialism*. International Journal of Ethics, January, 1891.
133. ——— *The Province of Sociology*. Annals of the American Academy of Political and Social Science, July, 1890. See also No. 76.
134. GIDE, C., *Principles of Political Economy*. D. C. Heath & Co., Boston.
135. GIFFEN, R., *The Progress of the Working Classes in the Last Half Century*. Society for Political Education, Economic Tract No. 16. New York.
136. GILBART, J. W., *History, Principles, and Practice of Banking*. Revised ed. An admirable book. G. Bell and Sons, London; Charles Scribner's Sons, New York.
137. GILMAN, N. P., *Profit-Sharing between Employer and Employee, a study in the evolution of the wages system*. A good book. Houghton, Mifflin & Co., Boston.
138. ——— *Socialism and the American Spirit*. Houghton, Mifflin & Co., Boston.
139. GLADDEN, W., *Working People and their Employers*. A plain, sensible book. Funk & Wagnalls, New York.
140. GODIN, JEAN B. A., *The Association of Capital with Labor, being the laws and regulations of mutual assurance regarding the Social Palace at Guise*. G. P. Putnam's Sons, and Social Science Association, New York.
141. ——— *Social Solutions*. Translated by Marie Howland. J. W. Lowell & Co., New York.
142. GOMME, G. L., *The Village Community*. Charles Scribner's Sons, New York.
143. GOSCHEN, G. J., *Theory of Foreign Exchanges*. E. Wilson & Co., London.
144. GOSS, JOHN D., *History of Tariff Administration in the United States, from colonial times to the McKinley Bill*. Columbia University Publications, New York.
145. GOULD, E. R. L., *The Social Condition of Labor*. Johns Hopkins University Studies in Historical and Political Science, Baltimore.
146. GRAFFENRIED, CLARE DE, and WILLOUGHBY, W. F., *Child Labor*. American Economic Association, Baltimore.
147. GRIFFIN, R., *The Growth of Capital*. 6th ed. G. Bell & Sons, London.
148. GRONLUND, LAURENCE, *The Coöperative Commonwealth; an Exposition of Modern Socialism*. Revised ed. Lee & Shepard, Boston; J. W. Lowell & Co., New York.
149. GUNTON, G., *Wealth and Progress; the Economic Philosophy of the Eight Hour Movement*. D. Appleton & Co., New York.
150. ——— *Principles of Social Economics*. G. P. Putnam's Sons, New York.
151. HADLEY, A. T., *Railroad Transportation, its History and its Laws*. G. P. Putnam's Sons, New York.
152. ——— *Workings of the Interstate Commerce Law*. Quarterly Journal of Economics, Boston.
153. HALL, HUBERT, *Customs Revenue in England from the Earliest Times to the Year 1827*. Elliot Stock, London.
154. HALL, W. H., *Irrigation Development*. State Printing Office, Sacramento, Cal.
155. HAMILTON, ALEXANDER, *Reports on Manufactures*. A classic. C. S. Francis & Co., New York.

156. HARRIS, W. T., *The Right of Property and the Ownership of Land, Against Henry George*. Cupples & Hurd, Boston.
157. HARRISON, F., *The New Trades-Unionism*. *Nineteenth Century*, November, 1889.
158. HELD, ADOLPH, *Zwei Bücher zur Socialen Geschichte Englands*. Düncker & Humboldt, Leipsic.
159. HEYL, LEWIS, *United States Duties and Imports*. 30th ed. W. H. Morrison, Washington, D. C.
160. HILDEBRAND, BRUNO, *Die Nationalökonomie der Gegenwart und Zukunft*. Frankfurt, 1848.
161. — *Theorie des Geldes*. G. Fischer, Jena.
162. HINTON, R. J., *Irrigation in the United States; a report prepared under direction of Commissioners of Agriculture*. Washington, D. C., Government Printing Office.
163. *History of Coöperation in the United States*, by various writers. American Economic Association, Baltimore.
164. HORT, A. B., *Disposition of our Public Lands*. *Quarterly Journal of Economics*, January, 1887.
165. HORTON, S. DANA, *The Silver Pound and England's Monetary Policy since the Restoration*. Macmillan & Co., New York.
166. — *Silver in Europe*. Macmillan & Co., New York.
167. HOWELL, G., *Conflicts of Capital and Labor Historically and Economically Considered*. New and revised ed. Macmillan & Co., New York.
168. HUDSON, J. F., *The Railways and the Republic*. Harper & Brothers, New York.
169. HUFF, L. J., *Ferdinand Lassalle*. *Political Science Quarterly*, September, 1887.
170. IHERING, R. VON, *The Struggle for Law*. Translated from the fifth German edition of *Zweck im Recht* (see page 81), by J. J. Lalor. Callaghan & Co., Chicago.
171. INGRAM, J. K., *A History of Political Economy*. Excellent, though conspicuously in sympathy with the historical school. Macmillan & Co., New York.
172. JAMES, EDMUND J., *Relation of the Modern Municipality to the Gas Supply*. American Economic Association, Baltimore.
173. — *Canal and Railway*. American Economic Association, Baltimore.
174. JEVONS, W. S., *The Theory of Political Economy*. New and enlarged ed. Macmillan & Co., New York.
175. — *The State in Relation to Labor*. Macmillan & Co., New York.
176. — *Money and the Mechanism of Exchange*. D. Appleton & Co., and Humboldt Publishing Co., New York.
177. — *Investigations in Currency and Finance*. Macmillan & Co., New York.
178. — *Methods of Social Reform*. Macmillan & Co., New York.
179. KEARNY, J., *Sketch of American Finance, 1789 to 1835*. G. P. Putnam's Sons, New York.
180. KERR, NORMAN, M. D., *Inebriety, its Etiology, Pathology, Treatment, and Jurisprudence*. H. K. Lewis, London.
181. KEYNES, J. N., *The Scope and Method of Political Economy*. Macmillan & Co., New York.
182. KINLEY, DAVID, *The Independent Treasury*. T. Y. Crowell & Co., New York.
183. KIRKUP, T., *Inquiry into Socialism*. Longmans, Green & Co., London.

184. KNIES, KARL, *Die Politische Oekonomie vom Standpunkte der geschichtlichen Methode*. 2d ed. Brunswick, 1883.
185. ——— *Geld und Kredit*. Berlin.
186. KNOX, JOHN JAY, *United States Notes; a history of the various issues of paper money by the Government of the United States*. Charles Scribner's Sons, New York.
187. LALOR, J. J., *Cyclopedia of Political Science, Political Economy, and Political History of the United States*. Invaluable to the student. Herbert B. Cary & Co., Chicago.
188. *Land Commissioner of the United States, Annual Report of the Secretary of the Interior*. Washington, D. C.
189. LANGE, F. A., *Die Arbeiterfrage*. 8d ed. Winterthur, 1875.
190. LASSALLE, FERDINAND, *Workingman's Program*. Translated by E. Peters. The Modern Press, London.
191. LAUGHLIN, J. L., *History of Bimetallism in the United States*. D. Appleton & Co., New York.
192. LAVELEYE, EMILE DE, *Elements of Political Economy*. G. P. Putnam's Sons, New York.
193. ——— *Socialism of To-day*. Charles Scribner's Sons, New York.
194. ——— *Primitive Property*. London.
195. LEE, JOSEPH, *Ethics of a Single Tax*. *Quarterly Journal of Economics*, Boston.
196. LEROY-BEAULIEU, PAUL, *Traité de la Science des Finances*. A work of the first order. Guillaumin, Paris.
197. ——— *L'Etat Moderne et ses Fonctions*. Guillaumin, Paris.
198. ——— *Le Collectivisme*. Guillaumin, Paris.
199. ——— *La Répartition des Richesses*. Guillaumin, Paris.
200. ——— *De l'Etat moral et intellectuel des Populations ouvrières et de son influence sur le taux des Salaires*. Guillaumin, Paris.
201. ——— *La Question ouvrière au XIXième siècle*. Charpentier, Paris.
202. ——— *Le Travail des femmes au XIXième siècle*. Charpentier, Paris.
203. LESLIE, T. E. C., *Essays in Political and Moral Philosophy*. Dublin.
204. ——— *Land Systems and Industrial Economy of Ireland, England, and Continental Countries*. London.
205. LEWIS, WILLIAM D., *The Political Organization of a Modern Municipality*. *Annals of the American Academy of Political and Social Science*, Philadelphia.
206. LIST, F., *National System of Political Economy*. J. B. Lippincott, and Claxton, Remsen & Co., Philadelphia.
207. LLOYD, H. D., *Strike of Millionaires against Miners, the story of Spring Valley*. Belford, Clark & Co., New York.
208. LORIA, ACHILLE, *La Rendita Fondiaria e la sua elisione naturale*. Milan.
209. LOW, SETH, *The Problem of City Government*. Johns Hopkins University Studies, Baltimore.
210. LUBBOCK, SIR JOHN, *Prehistoric Times*. D. Appleton & Co., New York.
211. ——— *Origin of Civilization and Primitive Condition of Man*. D. Appleton & Co., New York.
212. MACKENZIE, J. S., *The Relation of Economics to Ethics*. *International Journal of Ethics*, Philadelphia.
213. MAINE, SIR HENRY, *Village Communities in the East and West*. Little, Brown & Co., Boston; Henry Holt & Co., New York.
214. ——— *Early History of Institutions*. Little, Brown & Co., Boston; Henry Holt & Co., New York.

215. — Ancient Law. Little, Brown & Co., Boston; Henry Holt & Co., New York. These three books are classics.
216. MALTHUS, T. R., Essay on the Principles of Population. Ward, Lock & Co., London and New York.
217. MARSHALL, A., Principles of Economics. Macmillan & Co., New York.
218. MARSHALL, A., and MARY PALEY, Economics of Industry. Macmillan & Co., New York.
219. MARX, KARL, Capital; "The Bible of Socialism." D. Appleton & Co., Charles Scribner's Sons, and Humboldt Publishing Co., New York.
220. MASON, D. H., Short Tariff History of the United States. D. H. Mason, Chicago.
221. MAYR, HEINRICH, Die Waldungen von Nordamerika. M. Rieger, Munich.
222. MCNEILL, GEORGE E., and others, The Labor Movement, the Problem of To-day. M. W. Hazen & Co., New York.
223. MILL, J. S., Principles of Political Economy. Little, Brown & Co., Lee & Shepard, Boston. Also an annotated, abridged, and somewhat mutilated edition by J. Laurence Laughlin. D. Appleton & Co., New York.
224. — Socialism. Belford, Clark & Co., Chicago.
225. MINOT, W., Jr., Taxation in Massachusetts. Houghton, Mifflin & Co., Boston.
226. MITCHELL, KATE, M.D., The Drink Question. Swan, Sonnenschein & Co., London.
227. MONTESQUIEU, M. DE S., The Spirit of Laws. One of the greatest books ever written. R. Clarke & Co., Cincinnati.
228. MORGAN, L. H., Ancient Society. Henry Holt & Co., New York.
229. MORSE, J. T., Banks and Banking; a treatise on the law of banking. Little, Brown & Co., Boston.
230. MULFORD, E., The Nation. Houghton, Mifflin & Co., Boston.
231. MUNRO, J. E. C., The Probable Effects of an Eight-hour Day on the Production of Coal and Wages of Miners. Economic Journal, Macmillan & Co., London.
232. New York State Charities Association, Postal Savings Bank for the United States. Published by the Association.
233. New York State Legislature, Report of Committee on Railroad Abuses. Albany.
234. NEWTON, F. W., The Progress of Political Economy since Adam Smith. International Journal of Ethics, Philadelphia.
235. NICHOLSON, J. S., Treatise on Money and Essays on Present Monetary Problems. Blackwood, London.
236. NOBLE, J. H., The Immigration Question. Political Science (quarterly, New York).
237. NORDHOFF, C., Communistic Societies of the United States. Harper & Brothers, New York.
238. NOYES, J. H., History of American Socialism. J. B. Lippincott & Co., Philadelphia.
239. PALGRAVE, R. H. I., Dictionary of Political Economy. Macmillan & Co., New York.
240. PATTEN, S. N., The Premises of Political Economy. J. B. Lippincott & Co., Philadelphia.
241. — The Consumption of Wealth. University of Pennsylvania, Philadelphia.
242. — The Stability of Prices. American Economic Association, Baltimore

243. — Theory of Dynamic Economics. University of Pennsylvania, Philadelphia (see controversy following in the *Annals*, etc).
244. — Malthus and Ricardo. American Economic Association, Baltimore.
245. — The Interpretation of Ricardo. *Quarterly Journal of Economics*; also reprinted.
246. — Economic Basis of Protection. J. B. Lippincott & Co., Philadelphia.
247. — The Ethics of Land Tenure. *International Journal of Ethics*, Philadelphia.
248. PILKIN, T., Statistical View of the Commerce of the United States. Durrie & Peck, New Haven, Conn.
249. POWERS, F. P., Railroad Indemnity Lands. *Political Science Quarterly*, September, 1889.
250. PRICE, BONAMY, Principles of Currency and Banking. D. Appleton & Co., New York.
251. PRICE, L. L. F. R., Industrial Peace, its Advantages, Methods, and Difficulties. A report. Macmillan & Co., New York.
252. RAE, J., Contemporary Socialism. Charles Scribner's Sons, New York.
253. Railroad Gazette, State Railroad Ownership. An able argument translated from the German. New York.
254. RAND, BENJAMIN, Economic History since the Seven Years' War. Cambridge, Mass.
255. REA, JOHN, The Eight-hour Day in Victoria. *Economic Journal*, vol. i. Macmillan & Co., London.
256. Report of the Bullion Committee. A classic. J. Johnson & Co., London.
257. Report on the Relation of Municipalities to Quasi-Public Works. American Economic Association, Baltimore.
258. RICARDO, DAVID, Principles of Political Economy and Taxation. Macmillan & Co., Charles Scribner's Sons, New York.
259. RICHARDSON, B. W., M.D., Ten Lectures on Alcohol. Macmillan & Co., New York.
260. RIIS, JACOB A., How the Other Half Lives. Charles Scribner's Sons, New York.
261. ROGERS, J. E. THOROLD, Six Centuries of Work and Wages; the History of English Labor. 2d ed. Swan, Sonnenschein & Co., London; G. P. Putnam's Sons, New York. Also an abridged edition. Swan, Sonnenschein & Co., and Humboldt Publishing Co., New York.
262. — History of Agriculture and Prices in England. Macmillan & Co., New York.
263. — First Nine Years of the Bank of England. Macmillan & Co., New York.
264. — The Economic Interpretation of History. Macmillan & Co., New York.
265. ROSCHER, W., Principles of Political Economy. Translated by J. J. Lalor. Henry Holt & Co., New York; Callaghan & Co., Chicago.
266. — System der Finanzwissenschaft. 3d ed. S. G. Cotta, Stuttgart.
267. — Zur Geschichte der Englischen Volkswirtschaftslehre. Leipzig.
268. — Geschichte der National Oekonomie in Deutschland. Munich.
269. ROSS, EDWIN A., Sinking Funds. American Economic Association, Baltimore.
270. SAINT-SIMON, H., Œuvres. E. Dentu, Paris.
271. SAY, J. B., Treatise on Political Economy. 6th ed.; new American ed. Claxton, Remsen & Co., Philadelphia.

272. SCHÄFFLE, A., *The Quintessence of Socialism*. Humboldt Publishing Co., New York.
273. — *Gesellschaftliches System der Menschlichen Wirthschaft*. Tübingen, 1873.
274. SCHÄFFLE, G., *Der Telegraph in Administrativer und finanzieller Hinsicht*. Stuttgart.
275. SCHLOSS, D. F., *The Increase in Industrial Remuneration Under Profit-Sharing*. *Economic Journal*, vol. i. Macmillan & Co., London.
276. SCHMOLLER, H., *Ueber Einige Grundfragen des Rechts und der Volkswirtschaft*. Jena, 1875.
277. SCHÖNBERG, GUSTAV, *Handbuch der Politischen Oekonomie*. 3d ed. Tübingen.
278. SCHÖNHOF, J., *The Industrial Situation and the Question of Wages*. G. P. Putnam's Sons, New York.
279. SCHULZE-DELITSCHE, H., *Die Vorschuss-und Creditvereine als Volksbanken*. Leipsic.
280. SCOTT, W. A., *The Repudiation of State Debts*. T. Y. Crowell & Co., New York.
281. SEEBOHM, F., *The English Village Community*. 2d ed. Longmans, Green & Co., London.
282. SELIGMAN, E. R. A., *The Shifting and Incidence of Taxation*. American Economic Association, Baltimore.
283. — *Taxation of Corporations*. *Political Science Quarterly*, New York.
284. — *General Property Tax*. Ginn & Co., New York.
285. — *Railway Tariff and the Interstate Commerce Law*. Ginn & Co., New York.
286. — *Finance Statistics of the American Commonwealth*. American Statistical Association, Boston.
287. — *Two Chapters on the Mediæval Guilds of England*. American Economic Association, Baltimore.
288. — *Owen and the Christian Socialists*. Ginn & Co., New York.
289. SEYD, ERNEST, *Bimetallism in 1886 and the Farther Fall of Silver*. E. Wilson & Co., London.
290. — *Bullion and the Foreign Exchanges*. E. Wilson and Co., London.
291. SHAW, ALBERT, *Municipal Government in England*. Johns Hopkins University Studies, Baltimore.
292. — *Icaria, a chapter in the history of communism*. G. P. Putnam's Sons, New York.
293. — *The National Revenue*. A. C. McClurg & Co., Chicago.
294. SHEARMAN, T. G., *The Distribution of Wealth*. H. George & Co., New York.
295. SHERWOOD, S., *The History and Theory of Money*. J. B. Lippincott & Co., Philadelphia.
296. SIDGWICK, H., *Scope and Method of Economic Science*. Macmillan & Co., New York.
297. — *Principles of Political Economy*. Macmillan & Co., New York.
298. — *Economic Socialism*. *Contemporary Review*, November, 1886.
299. SISMOUDI, J. C. L. DE, *Nouveaux Principes d'Economie Politique*. 2d ed. Paris, 1827.
300. SMART, WILLIAM, *Introduction to the Theory of Value*. Macmillan & Co., New York.
301. SMITH, ADAM, *Wealth of Nations*. R. Worthington, New York; G. P. Putnam's Sons, New York; Bohn's Library, Little, Brown & Co., Boston;

- Charles Scribner's Sons, New York; Ward, Lock & Co., New York; George Routledge & Sons, New York (the best cheap edition); Macmillan & Co., New York (the best edition).
302. Smithsonian Institution, Reports of Bureau of Ethnology. Publications of the Institution.
 303. SNELL, W. E., Coöperation and Profit-Sharing. Economic Review, London.
 304. SOETBEER, A., Precious Metals. Translated by F. W. Taussig. Included in No. —.
 305. SPAHR, C. B., The Single Tax. Political Science Quarterly, New York.
 306. SPENCER, HERBERT, The Study of Sociology. D. Appleton & Co., New York.
 307. — The Principles of Sociology. 2 vols. D. Appleton & Co., New York.
 308. — Descriptive Sociology, a cyclopedia of social fact. D. Appleton & Co., New York.
 309. — Social Statics. D. Appleton & Co., New York.
 310. — The Man vs. The State. D. Appleton & Co., New York.
 311. *Standard, The* (Henry George's organ). New York.
 312. STANLEY, H. M., In Darkest Africa. Charles Scribner's Sons, New York.
 313. STEPNIAK, Russia Under the Tsars. Harper & Brothers, New York; Charles Scribner's Sons, New York.
 314. SUMNER, W. G., History of Protection in the United States. G. P. Putnam's Sons, New York.
 315. — Essays in Political and Social Science. Henry Holt & Co., New York.
 316. — Life of Alexander Hamilton. Dodd, Mead & Co., New York.
 317. TAUSSIG, F. W., Tariff History of the United States. G. P. Putnam's Sons, New York.
 318. — The Silver Situation in the United States. American Economic Association, Baltimore.
 319. — Workingmen's Insurance in Germany. Quarterly Journal of Economics, October, 1887; also Forum, October, 1889.
 320. TAYLOR, E. W. C., Introduction to a History of the Factory System. R. Bentley & Sons, London.
 321. THOMPSON, R. E., Protection to Home Industry. D. Appleton & Co., New York.
 322. THOMPSON, R. W., History of Protective Tariff Laws. Hill & Harvey, New York.
 323. THORNTON, W. T., Plea for Peasant Proprietors. Macmillan & Co., New York.
 324. — On Labor, its Claims and Dues. 8d ed. Macmillan & Co., New York.
 325. — Overproduction and its Remedy. Longmans, Green & Co., London.
 326. TOCQUEVILLE, ALEXIS DE, Democracy in America. 61st ed. J. Allyn, Boston.
 327. TOYNBEE, A., Industrial Revolution in England. Humboldt Publishing Co., New York.
 328. TRAUT, W., Trades Unions. Charles Scribner's Sons, New York.
 329. TYLER, Anthropology. D. Appleton & Co., New York.
 330. *Union Signal* (organ of the W. C. T. U.). Chicago.
 331. United States Consular Reports, Trade Guilds of Europe. Department of State, 1885.

332. United States Patent Office Reports.
333. *Voice, The* (Prohibition organ). Funk & Wagnalls, New York.
334. WAGNER, ADOLPH, *Grundlegung der Politischen Oekonomie*. C. F. Winter, Leipsic.
335. ——— *Finanzwissenschaft*. C. F. Winter, Leipsic.
336. ——— *Die Abschaffung des privaten Grundeigenthums*. Duncker & Humboldt, Leipsic.
337. WALKER, F. A., *Political Economy* (several different courses). Henry Holt & Co., New York.
338. ——— *Money*. Henry Holt & Co.
339. ——— *Money, Trade and Industry* (contains substance of the preceding). Henry Holt & Co., N. Y.
340. ——— *Land and its Rent*. Little, Brown & Co., Boston.
341. ——— *The Wages Question*. Henry Holt & Co., New York.
342. ——— *The Eight-hour Law Agitation*. *Atlantic Monthly*, June, 1890.
343. WALLACE, A. R., *Land Nationalization, its Necessity and its Aims*. W. Reeves, London.
344. WALLACE, MACKENZIE, *Russia*. New ed. Henry Holt & Co., New York; George Munro, New York.
345. WARD, LESTER F., *Dynamic Sociology*. D. Appleton & Co., New York.
346. WARNER, A. G., *Notes on the Statistical Determination of the Causes of Poverty*. American Statistical Association, Boston.
347. ——— *Some Experiments on Behalf of the Unemployed*. *Quarterly Journal of Economics*, Boston.
348. WEBB, SIDNEY, *Socialism in England*. American Economic Association, Baltimore.
349. WEBER, MAX VON, *Nationalität und Eisenbahnpolitik*. A. Hartleben, Vienna.
350. ——— *Privat- Staats- und Reichs-Bahnen*. A. Hartleben, Vienna.
351. WEEDEN, W. B., *Economic and Social History of New England*. Houghton, Mifflin & Co., Boston.
352. WEEKS, JOSEPH D., *Labor Difficulties and their Settlement*. G. P. Putnam's Sons, New York.
353. ——— *Arbitration and Conciliation; their practical operation in the settlement of differences between employers and employees*. American Iron and Steel Publishing Co., Pittsburg.
354. ——— *Arbitration and Conciliation in France and England*. American Iron and Steel Publishing Co., Pittsburg.
355. ——— *Industrial Conciliation and Arbitration in New York, Ohio, and Pennsylvania* (included in Twelfth Annual Report of Massachusetts Bureau of Statistics of Labor). Boston, Mass.
356. WELLS, B. W., *Compulsory Insurance in Germany*. *Political Science Quarterly*, New York.
357. WELLS, D. A., *Relation of the Government to the Telegraph*. New York.
358. ——— *Recent Economic Changes*. D. Appleton & Co., New York.
359. ——— *Our Merchant Marine*. G. P. Putnam's Sons, New York.
360. ——— *Creed of Free Trade*. H. O. Houghton & Co., Boston.
361. WETHERELL, JANE J., *Railroad Passenger Fares in Hungary (the zone system)*. *Annals of the American Academy of Political and Social Science*, Philadelphia, July, 1890.
362. WHITE, A. D., *Paper Money Inflation in France* (in Lalor's *Cyclopedia*).
363. WILLOUGHBY, W. F. (see No. 146).
364. WILSON, DANIEL, *Prehistoric Man*. Young & Co., New York.

365. WINES, E. C., *State of Prisons and Child-saving Institutions*. An admirable book. J. Wilson & Son, Cambridge, Mass.
366. WOLOWSKI, L., *L'Or et l'Argent*. Paris.
367. ——— *De la Monnaie*. Paris.
368. WOOD, STUART, *Theory of Wages*. American Economic Association, Baltimore.
369. WRIGHT, C. D., *The Factory System in the United States*, vol. ii; Tenth Census of the United States. Washington, D. C. For a large number of pamphlets prepared by this writer on various social questions, see B. and I.
370. YOUNG, E., *Labor in Europe and America*. Government Printing Office, Washington, D. C.; also S. A. George & Co., Philadelphia.

PERIODICALS.

Among the most important are:

- THE ECONOMIC JOURNAL (Journal of the British Economic Association). Macmillan & Co., London and New York.
- THE ECONOMIC REVIEW (published quarterly for the Oxford University Branch of the Christian Social Union). Percival & Co., London.
- THE POLITICAL SCIENCE QUARTERLY, New York.
- THE QUARTERLY JOURNAL OF ECONOMICS, Boston.
- THE ANNALS OF THE AMERICAN ACADEMY OF POLITICAL AND SOCIAL SCIENCE, Philadelphia.
- THE INTERNATIONAL JOURNAL OF ETHICS, Philadelphia.

The American Economic Association of Baltimore and other associations and universities issue frequent though not "periodical" monographs.

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